Science Stations

Growth & Cycles Plants & Animals

Third Grade NGSS 3-LS1.B

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& Jill Elliott

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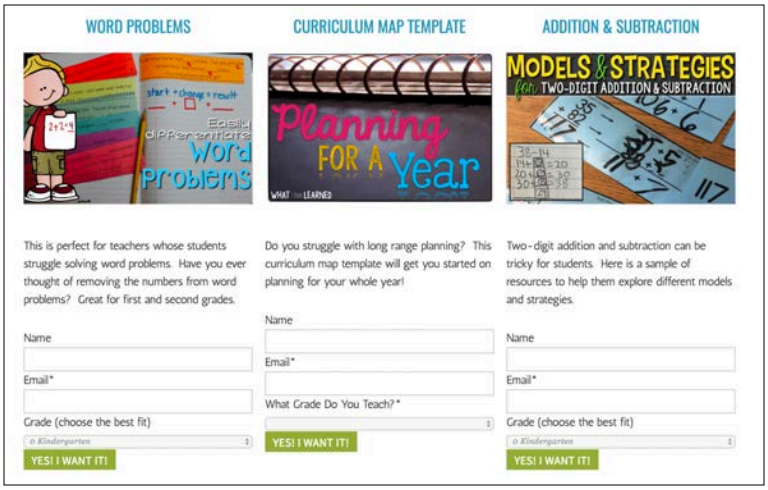

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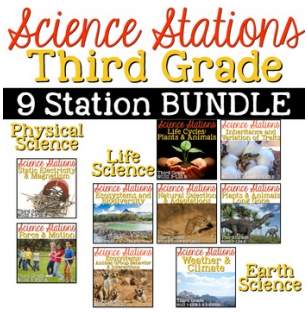
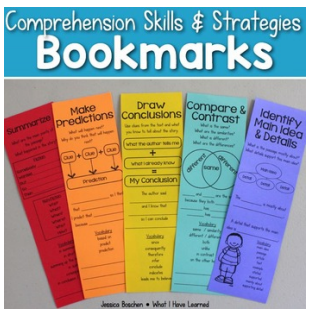




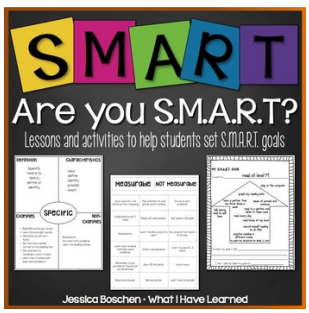


Table of Contents

Science Stations Overview

Watch a Video

At this station, students will watch a video relevant to the topic and answer questions. You have the option of the included worksheet with the questions or use task cards and have students respond in their science journals.

Read a Passage

Students read a short passage about the topic and answer questions about the information in the passage. You have the option of the included worksheet with the questions or use task cards and have students respond in their science journals.

Play a Video Game

Students play an online video game and answer questions about the experience. You have the option of the included worksheet with the questions or use task cards and have students respond in their science journals.

Create a Model

Students use materials to illustrate the science concept and answer questions. You have the option of the included worksheet with the questions or use task cards and have students respond in their science journals.

Investigate

Students use materials to investigate the science topic by following directions and recording results. Students answer questions about the investigation.

Explore

Students create a sample and manipulate it using the new science concepts they have learned. Students answer question based on the effects.

Draw a Diagram

Students draw and label a diagram specific to certain requirements. Students then explain how their diagram meets the requirements.

Sort

Students sort cards into groups or put them in a specific order. Students record the sort and then describe their reasoning.

Growth & Cycles: Plants & Animals

Science Stations

These Science Stations have several different ways students can display their understanding. Most of the variations are similar to each other, but differentiated for various classrooms and learning styles. Included are worksheets for both short-answer and fill-in-the-blank, and task cards for both short-answer and multiple choice responses. To provide even more support, give students a word list for the fill-in-the-blank options. Also included are vocabulary cards in two formats, which could become a ninth station if needed.

Students are encouraged to use their Science Journals with the task cards, but worksheets are provided as well. Use the checklist to monitor student progress through the stations.

The Science Stations are designed to last about 20 minutes each. Students may do one a day for 8 days or 2 a day for four days. The following checklists will help you organize the stations.

<u>Watch a Video</u>

Students watch a video about the life of a dung beetle or the life of a plant and answer questions about the video. Students will need a computer.

<u>Play a Video Game</u>

Students play a video game to learn about (choose one) hogweed, parts of a flower, helping a plant grow, or animal life cycles. Students answer questions about the game. Students will need a computer. The hogweed and parts of a flower games fulfill the same objective. The hogweed game is more fun, but could be confusing. Choose the game that best fits the needs of your students.

<u>Investigate</u>

Students learn about insect life cycles, color insect phases, and answer questions about them.

<u>Draw a Diagram</u>

Students put the stages of various animals' life cycles in proper order and answer questions about it.

<u>Read a Passage</u>

Students will read a passage about the life cycle and migratory patterns of Canada Geese and answer questions about it.

<u>Create a Model</u>

Students will dissect a flower and identify all the structures on the flower.

<u>Explore</u>

Students will sort a variety of fruits and vegetables into categories based on which parts of the plants we eat. Students will answer questions about the sort.

<u>Sort</u>

Students sort various plants according to their stage in the life cycle.

Materials Checklist
Growth & Cycles: Plants & Animals

Use the following checklist to make sure you have all the materials for your stations.

Watch a Video
- ☐ Computer / Device
- ☐ Directions Card
- ☐ Worksheet
- ☐ Task Cards
- ☐ Science Journal

Play a Video Game
- ☐ Computer
- ☐ Directions Card
- ☐ Worksheet
- ☐ Task Cards
- ☐ Science Journal

Investigate
- ☐ Pictures of Complete & Incomplete Metamorphosis
- ☐ Response Sheet
- ☐ Task Cards
- ☐ Science Journal

Draw a Diagram
- ☐ Diagram pictures
- ☐ Cut & Paste Worksheets
- ☐ Response Sheet
- ☐ Task Cards
- ☐ Science Journal

Read a Passage
- ☐ Reading Passage
- ☐ Worksheet
- ☐ Task Cards

Create a Model
- ☐ Directions Cards
- ☐ Student Worksheets
- ☐ Scissors
- ☐ Peruvian Lily (Alstroemeria) or any other flower with clear male and female reproductive parts, 1 per student
- ☐ Clear Plastic Tape (scotch tape)
- ☐ Labeled Diagram of a Flower

Explore
- ☐ Directions Card
- ☐ Student Charts
- ☐ Completed Student Chart in an envelop to check answers
- ☐ Assorted fruits and vegetables, arranged on a tray, labeled with the name but not part of the plant (Ex.: carrot, apple) (see teacher notes for the activity for full list)

Sort
- ☐ Directions Card
- ☐ Student Chart
- ☐ Pictures to Cut Out
- ☐ Scissors
- ☐ Glue

Growth & Cycles: Plants & Animals

Name: _____

Science Stations

Check off each science station as you visit it. Use this form to record notes or use it for task cards.

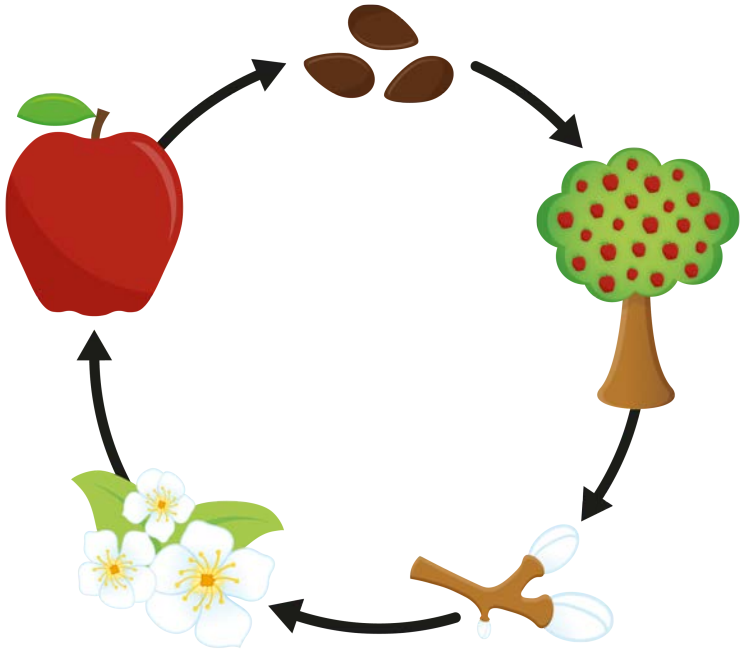
☐ *Watch* **a Video**	☐ *Play* **a Video Game**
☐ *Investigate* **Ant vs. Praying Mantis**	☐ *Diagram* **Animal Life Cycles**
☐ *Read* **Migrating Geese**	☐ *Model* **Flower Dissection**
☐ *Explore* **What Part of the Plant Do We Eat?**	☐ *Sort* **Plant Life Cycles**

Growth & Cycles: Plants & Animals

Science Stations

Use the following checklist to monitor student progress through the stations.

	Watch	Play	Investigate	Diagram	Read	Model	Explore	Sort
Group 1								
Group 2								
Group 3								
Group 4								
Group 5								
Group 6								
Group 7								
Group 8								

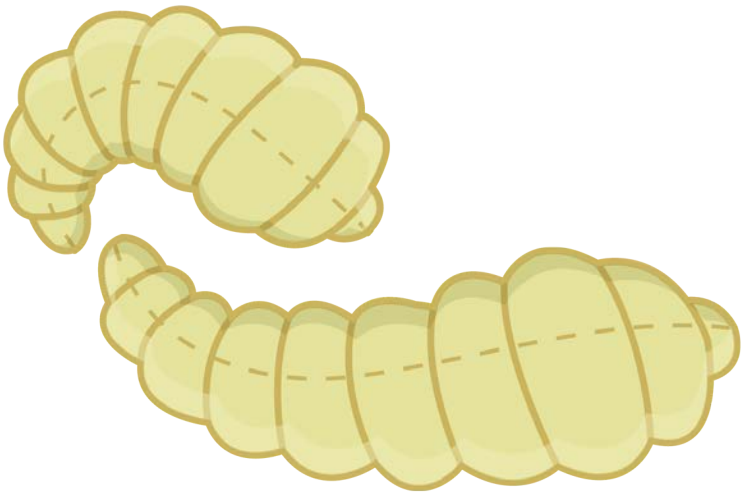


life cycle

All the changes that happen during a plant's or animal's life until they are fully grown and able to reproduce.

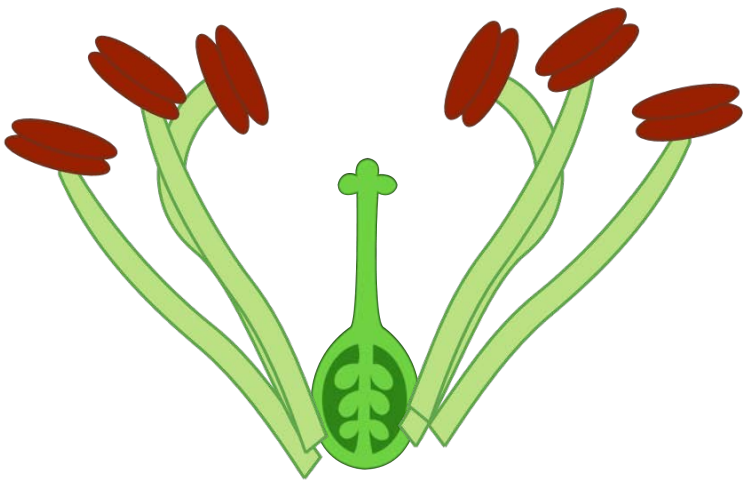
egg

The first stage in many animals' life cycles. The egg protects and feeds the growing animal.



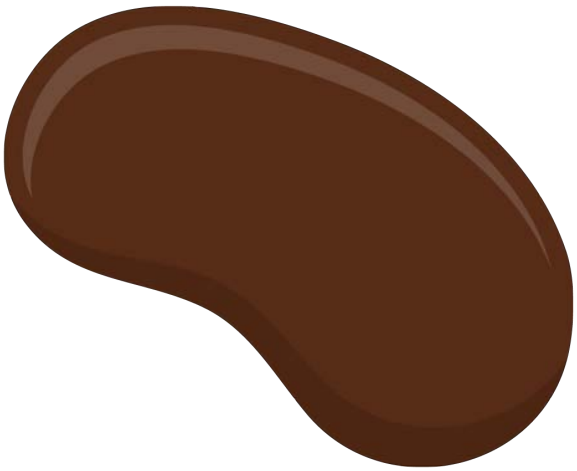
larva

The larva hatches from the egg. It looks very different from an adult. The larva eats and grows.



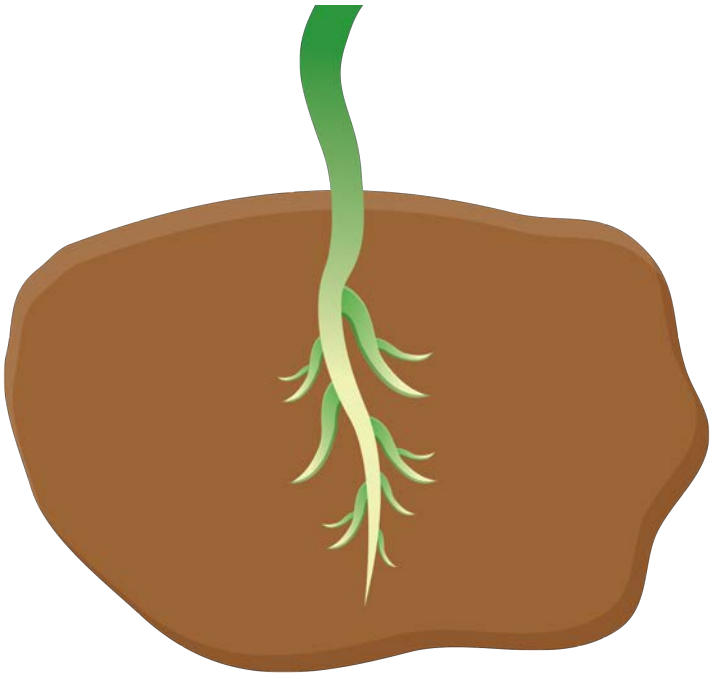
pollinate

When pollen moves to the part of the plant where it will help make the seed.



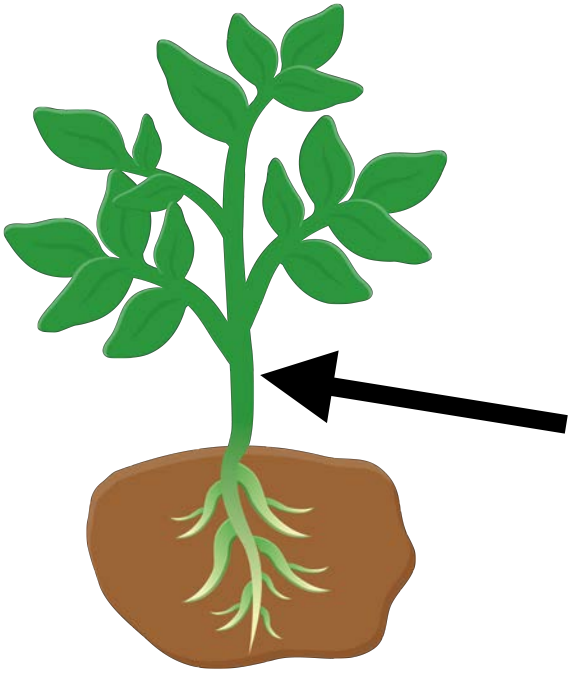
seed

The first stage of the plant life cycle. When it gets planted in the ground, it will grow into a new plant.



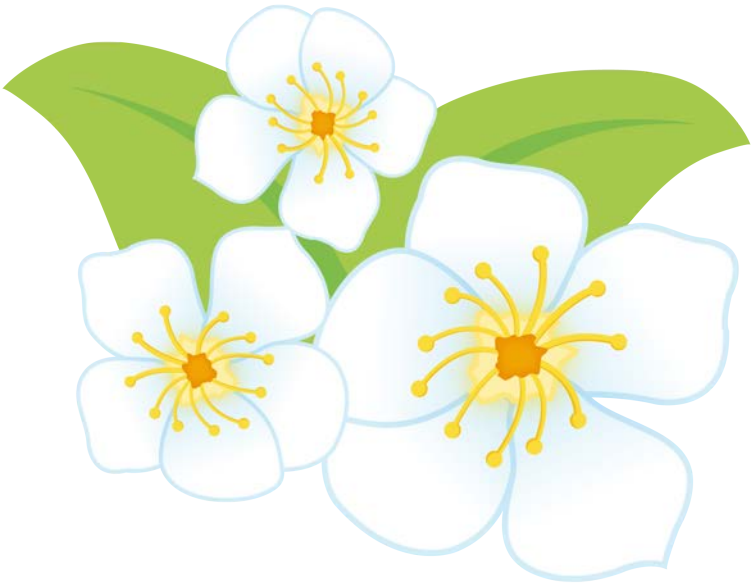
root

The part of the plant that grows underground. The roots hold the plant steady. They also take up water and minerals.



stem

The part of the plant that holds the plant upright.

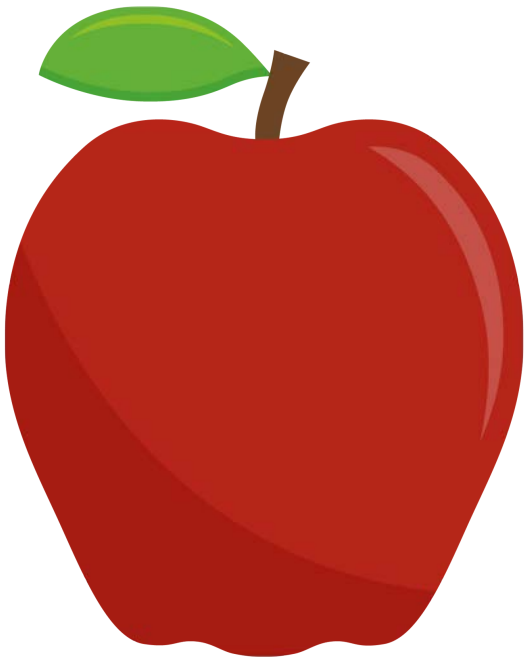


flower

The part of the plant that attracts insects that will pollinate the plant.

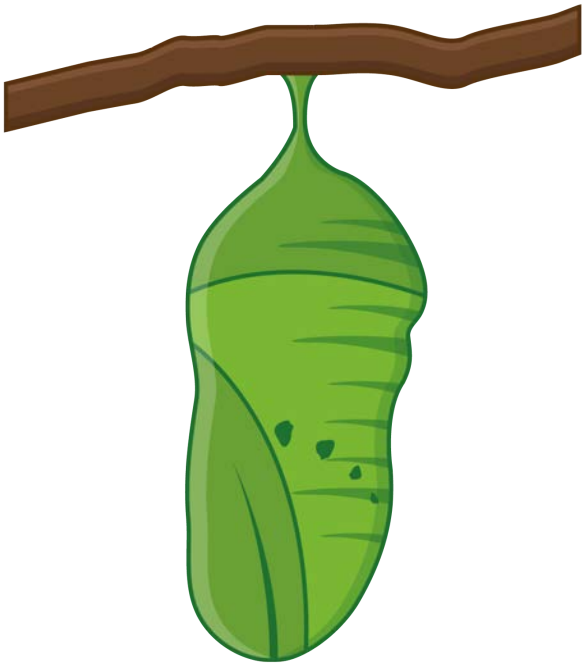
leaf

The part of the plant that makes food for the plant.



fruit

The part of the plant that has seeds.

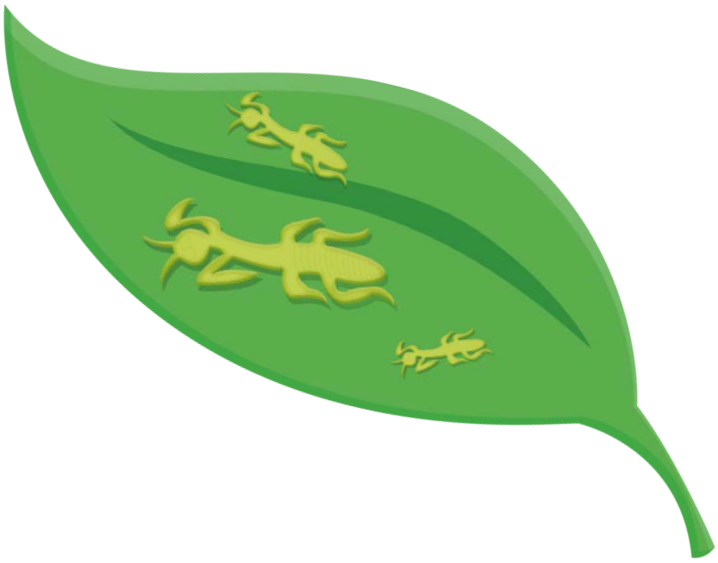


Protects the insect while it changes from a larva into an adult.

cocoon

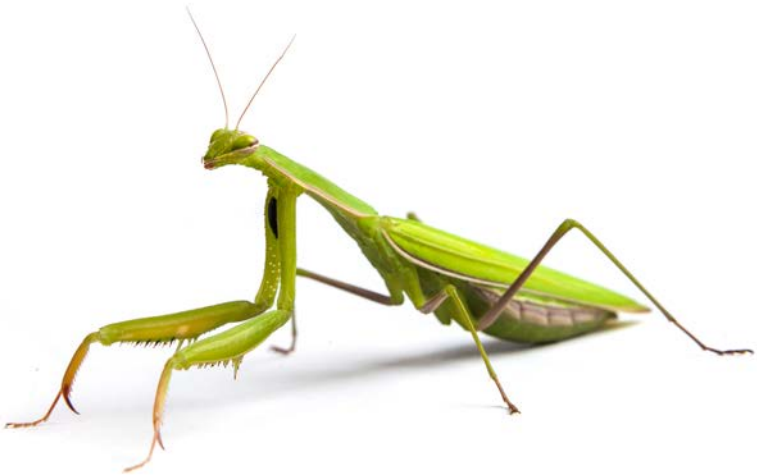
The stage of the insect life cycle when the larva changes into an adult. The pupa is inside a cocoon.

pupa



The young insect that looks similar to the adult.

nymph



The stage of the insect life cycle when the insect is ready to reproduce.

adult

When animals' bodies make big changes before they become adults.

metamorphosis

Moving from one habitat to another.

migrate

life cycle

All the changes that happen during a plant's or animal's life until they are fully grown and able to reproduce.

egg

The first stage in many animals' life cycles. The egg protects and feeds the growing animal.

larva

The larva hatches from the egg. It looks very different from an adult.
The larva eats and grows.

pollinate

When pollen moves to the part of the plant where it will help make the seed.

seed

The first stage of the plant life cycle. When it gets planted in the ground, it will grow into a new plant.

root

The part of the plant that grows underground. The roots hold the plant steady. They also take up water and minerals.

stem

The part of the plant that holds the plant upright.

flower

The part of the plant that attracts insects that will pollinate the plant.

leaf

The part of the plant that makes food for the plant.

fruit

The part of the plant that has seeds.

cocoon

Protects the insect while it changes from a larva into an adult.

pupa

The stage of the insect life cycle when the larva changes into an adult. The pupa is inside the cocoon.

nymph

The young insect that looks similar to the adult.

adult

The stage of the insect life cycle when the insect is ready to reproduce.

metamorphosis

When animals' bodies make big changes before they become adults.

migrate

Moving from one habitat to another.

Watch a Video

Use your device and watch
The Life of a Dung Beetle

https://www.youtube.com/watch?v=IIRHmSm36aE

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Watch a Video

Use your device and watch
The Life of a Dung Beetle

http://bit.ly/AfricanDung

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Watch a Video

Use your device and watch
The Life of a Dung Beetle

https://goo.gl/Q4q2Ex

Watch a Video

Use your device and watch
The Life of a Dung Beetle

https://goo.gl/Q4q2Ex

Watch a Video

Use your device and watch
The Life of a Dung Beetle

https://safeshare.tv/x/ss572a4a0985de6

Watch a Video

Use your device and watch
The Life of a Dung Beetle

https://safeshare.tv/x/ss572a4a0985de6

Watch a Video

Use your device and watch
The Life of a Dung Beetle

http://bit.ly/DungBeetle5

Watch a Video

Use your device and watch
The Life of a Dung Beetle

http://bit.ly/DungBeetle5

Watch a Video

Use your device and watch
The Life of a Dung Beetle

https://goo.gl/aUNdqW

Watch a Video

Use your device and watch
The Life of a Dung Beetle

https://goo.gl/aUNdqW

Watch a Video

Name: _____

Watch the video about The Life of a Dung Beetle and answer the following questions:

1. What does the dung beetle do to get the dung?

_____

_____

2. How does the dung beetle carry away the dung?

_____

_____

3. How does the dung ball get put together?

_____

_____

4. When the dung ball is rolled to where the dung beetles want it, what do they do with it?

_____

_____

_____

5. What happens after the dung ball is buried?

_____

_____

6. When the eggs hatch, what do the dung beetle larvae (baby dung beetles) eat?

_____

_____

7. What do you think would happen if dung beetles could not find any dung?

_____

_____

_____

Watch a Video

Name: _____

The Life of a Dung Beetle

1. The dung beetle takes a piece of _____, forms a

_____ shape, and rolls it away.

2. The dung beetle carries away the dung by walking on its

_____ and pushing the dung ball with its back legs.

3. The dung ball gets put together by the male and _____

beetles working together at it.

4. When the dung ball is rolled to where the dung beetles want it, they put it

_____.

5. Once the dung ball is buried, the female _____.

6. When the eggs hatch, the dung beetle larvae (baby dung beetles) eat

_____.

7. If dung beetles could not find any dung, something that might happen would be

_____.

Watch a Video

What does the dung beetle do to get the dung?

#1

Watch a Video

How does the dung ball get put together?

#3

Watch a Video

How does the dung beetle carry away the dung?

#2

Watch a Video

When the dung ball is rolled to where the dung beetles want it, what do they do with it?

#4

Watch a Video

What happens after the dung ball is buried?

#5

Watch a Video

What do you think would happen if dung beetles could not find any dung?

#7

Watch a Video

When the eggs hatch, what do the dung beetle larvae (baby dung beetles) eat?

#6

Watch a Video

#1 Watch a Video

The dung beetle forms the dung into the shape of a:

a. tube
b. beetle
c. ball
d. worm

#2 Watch a Video

The dung beetle carries away the dung by:

a. walking on its front legs and pushing it with its back legs
b. walking on its back legs and pushing it with its front legs
c. eating small bits of it and carrying it to its burrow
d. putting it on its back and carrying it to its burrow

#3 Watch a Video

Who puts together the dung ball?

a. the female dung beetle
b. the male dung beetle
c. the cow who made the dung
d. both the male and female work together

#4 Watch a Video

When the dung ball is rolled to where the dung beetles want it, where do they put it?

a. They bury it underground.
b. They make a house around it.
c. They leave it above ground.
d. They eat it.

#5 Watch a Video

Once the dung ball is put where it is supposed to be, what is the next thing the female dung beetle does with it?

a. She lays her eggs in it.
b. She walks away from it.
c. She eats it.
d. She lives in it.

Watch a Video

#6 Watch a Video

When the eggs hatch, what do the dung beetle larvae (baby dung beetles) eat?

a. the mother dung beetle
b. nearby plants
c. the dung
d. the dirt in their burrow

Watch a Video

Watch a Video

Use your device and watch
Stages of Plant Life Cycle:

https://www.turtlediary.com/video/the-life-cycle-of-plants.html

Watch a Video

Use your device and watch
Stages of Plant Life Cycle:

https://www.turtlediary.com/video/the-life-cycle-of-plants.html

Watch a Video

Use your device and watch Stages of Plant Life Cycle:

http://bit.ly/WatchPlant

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Watch a Video

Use your device and watch Stages of Plant Life Cycle:

https://goo.gl/YmUW9W

Watch a Video

Use your device and watch Stages of Plant Life Cycle:

https://goo.gl/YmUW9W

Watch a Video

Name: _____

Watch the video about Stages of Plant Life Cycle and answer the following questions:

1. How does the life cycle of a plant begin?

_____

_____

2. What does a seed need to begin to grow?

_____

_____

3. After the roots and stems grow, what part grows next? What does this part produce?

_____

_____

4. What part of the plant grows out of the seed first? What does this part of the plant do?

_____

_____

5. What does the leaf do?

_____

_____

6. What does the flower become after it is pollinated? What does this part have?

_____

_____

7. How can we grow a plant?

_____

_____

_____

Watch a Video

Name: _____

Stages of Plant Life Cycle

1. The life cycle of a plant begins with a _____.

2. When seeds get enough _____, _____, and minerals, they can begin to grow.

3. After the roots and stems grow, the next part of the plant to grow is _____.

4. The flowers produce _____.

5. The part of the plant that grows out of the seed first is the _____.

6. The roots take up _____ and minerals from the _____ to be used by the plant.

7. The leaf makes _____ for the plant.

8. After it is pollinated, the flower becomes _____. Inside the fruit are the _____.

10. In order to grow a plant, first put it in_____. Next _____ it regularly. Also, make sure it has enough _____.

Watch a Video

Name: _____

Stages of Plant Life Cycle

1. The life cycle of a plant begins with a _____.

2. When seeds get enough _____, _____, and minerals, they can begin to grow.

3. After the roots and stems grow, the next part of the plant to grow is _____.

4. The flowers produce _____.

5. The part of the plant that grows out of the seed first is the _____.

6. The roots take up _____ and minerals from the _____ to be used by the plant.

7. The leaf makes _____ for the plant.

8. After it is pollinated, the flower becomes _____. Inside the fruit are the _____.

10. In order to grow a plant, first put it in_____. Next it _____ regularly. Also, make sure it has enough _____.

Watch a Video

How does the life cycle of a plant begin?

#1

Watch a Video

What does a seed need to begin to grow?

#2

Watch a Video

After the roots and stems grow, what part grows next? What does this part produce?

#3

Watch a Video

What part of the plant grows out of the seed first? What does this part of the plant do?

#4

Watch a Video

What does the leaf do?

#5

Watch a Video

How can we grow a plant?

#7

Watch a Video

What does the flower become after it is pollinated? What does this part have?

#6

Watch a Video

#1 Watch a Video

The life cycle of a plant begins with a

a. flower
b. root
c. seed
d. fruit

#3 Watch a Video

After the roots and stems grow, what part of the plant grows next?

a. flower
b. root
c. seed
d. fruit

#2 Watch a Video

What does a seed need in order to begin to grow?

a. water
b. minerals
c. light
d. all of the above

#4 Watch a Video

What is made in the flower after it is pollinated?

a. eggs
b. sepals
c. pollen
d. seeds

#5 Watch a Video

What part of the plant grows out of the seed first?

a. flower
b. root
c. seed
d. fruit

#7 Watch a Video

What does the leaf do?

a. hold the plant up
b. make food for the plant
c. take up minerals for the plant
d. make water for the plant

#6 Watch a Video

Roots take up minerals and _____ from the ground to be used by the plant.

a. water
b. soil
c. rocks
d. leaves

#8 Watch a Video

What does the flower become after it is pollinated?

a. new plant
b. bud
c. egg
d. fruit

#9 Watch a Video

What does the fruit have in it?

a. seeds
b. roots
c. flower
d. stem

Watch a Video

#10 Watch a Video

To grow a plant, we must put it in soil.

We must then _____ .

a. water it regularly
b. make sure it gets proper sunlight
c. watch it carefully
d. a and b
e. a and c
f. a, b, and c

Watch a Video

Play a Video Game

Teacher Notes

In this section, there are four videos to choose from:

Attack of the Hogweed

Parts of a Flower

Help a Plant Grow

Animal Life Cycles

The first two games, Hogweed and Parts of a Flower, address the same objective: identifying the parts of a flower. The Hogweed game is more fun and engaging, but the narrator has a British accent that may be difficult for students to understand. The Parts of a Flower game is straightforward, but less fun.

All games come with the same components: short answer and fill-in-the-blank worksheets and task cards for both short answer and multiple choice answers.

Extend this station by choosing 2-3 different games for students to play that address different topics. Or, create an early finisher station with some of the resources from this station.

Play a Video Game

Attack of the Hogweed

Use your computer to play the video game at the following web address:

http://www.bbc.co.uk/bitesize/ks2/science/living_things/plant_life_cycles/play/

Play a Video Game

Attack of the Hogweed

Use your computer to play the video game at the following web address:

http://www.bbc.co.uk/bitesize/ks2/science/living_things/plant_life_cycles/play/

Play a Video Game

Attack of the Hogweed

Use your computer to play the video game at the following web address:
http://bit.ly/Hogweeds

Play a Video Game

Attack of the Hogweed

Use your computer to play the video game at the following web address:
http://bit.ly/Hogweeds

Play a Video Game

Attack of the Hogweed

Use your computer to play the video game at the following web address:

https://goo.gl/yPLNIY

Play a Video Game

Attack of the Hogweed

Use your computer to play the video game at the following web address:

https://goo.gl/yPLNIY

Play a Video Game

Attack of the Hogweed

Name: _____

1. What does the sepal do?

_____

2. What job do the petals have on a flower?

_____

3. What happens in the stamen?

_____

4. Play the second part of the game again. What are the four ways seeds were carried?

_____

_____

_____

_____

Play a Video Game

Attack of the Hogweed

Name: _____

1. What does the sepal do?

_____

2. What job do the petals have on a flower?

_____

3. What happens in the stamen?

_____

4. Play the second part of the game again. What are the four ways seeds were carried?

_____

_____

_____

_____

Play a Video Game

Attack of the Hogweed

Name: _____

1. The sepal is the part of the flower that _____.

2. On the flower, the job of the petals is to _____.

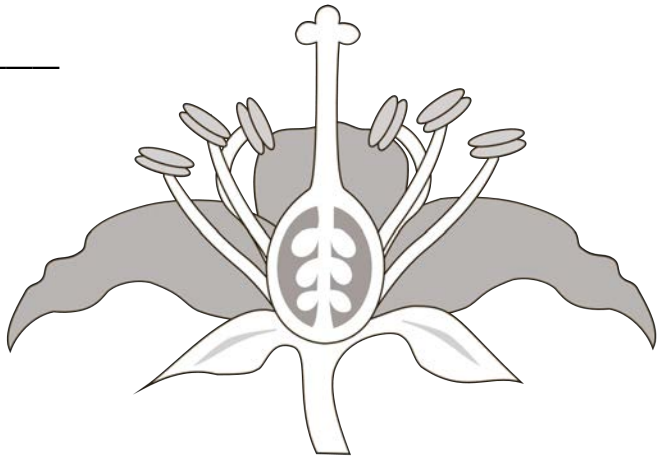
3. The stamen is where _____ is made.

4. Play the second part of the game again. There were four ways seeds were carried. These include: Inside the two animals, _____

and _____.

On the man's _____.

In the _____.



Play a Video Game

Attack of the Hogweed

Name: _____

1. The sepal is the part of the flower that _____.

2. On the flower, the job of the petals is to _____.

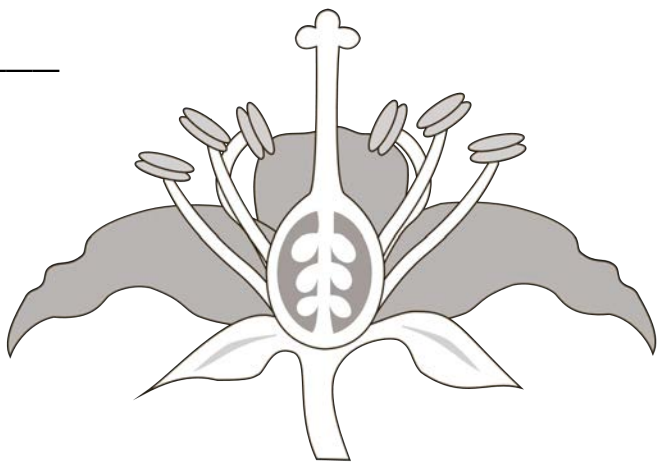
3. The stamen is where _____ is made.

4. Play the second part of the game again. There were four ways seeds were carried. These include: Inside the two animals, _____

and _____.

On the man's _____.

In the _____.



Play

Video Game

Attack of the Hogweed

What does the sepal do?

#1

Play

Video Game

Attack of the Hogweed

What happens in the stamen?

#3

Play

Video Game

Attack of the Hogweed

What job do the petals have on a flower?

#2

Play

Video Game

Attack of the Hogweed

Play the second part of the game again. What are the four ways seeds were carried?

#4

#1 Play Video Game

Attack of the Hogweed

The sepal is the part of the flower that _____.

a. protects flowers
b. attracts insects
c. makes pollen
d. makes seeds

#3 Play Video Game

Attack of the Hogweed

The stamen is the part of the flower that _____.

a. protects flowers
b. attracts insects
c. makes pollen
d. makes seeds

#2 Play Video Game

Attack of the Hogweed

On the flower, the job of the petals is to _____.

a. protect flowers
b. attract insects
c. make pollen
d. make seeds

#4 Play Video Game

Attack of the Hogweed

Play the second part of the game. Which of these ways were seed carried?

a. in an animal
b. with the wind and leaves
c. on the man's shoes
d. all of the above

Play a Video Game

Parts of a Flower

Use your computer to play the video game at the following web address:

http://www.bbc.co.uk/schools/scienceclips/ages/9_10/life_cycles.shtml

Play a Video Game

Parts of a Flower

Use your computer to play the video game at the following web address:

http://www.bbc.co.uk/schools/scienceclips/ages/9_10/life_cycles.shtml

Play a Video Game

Parts of a Flower

Use your computer to play the video game at the following web address:

http://bit.ly/PartsofaFlower

Play a Video Game

Parts of a Flower

Use your computer to play the video game at the following web address:

http://bit.ly/PartsofaFlower

Play a Video Game

Parts of a Flower

Use your computer to play the video game at the following web address:

https://goo.gl/kCniCl

Play a Video Game

Parts of a Flower

Use your computer to play the video game at the following web address:

https://goo.gl/kCniCl

Play a Video Game

Parts of a Flower

Name: _____

1. What does the sepal do?

_____

2. What job do the petals have on a flower?

_____

3. What happens in the stamen?

_____

4. What happens in the carpel?

_____

_____

5. True or False: There are male and female parts of a plant. _____

Play a Video Game

Parts of a Flower

Name: _____

1. What does the sepal do?

_____

2. What job do the petals have on a flower?

_____

3. What happens in the stamen?

_____

4. What happens in the carpel?

_____

_____

5. True or False: There are male and female parts of a plant. _____

Play a Video Game

Parts of a Flower

Name: _____

1. The sepal is the part of the flower that _____ flowers.

2. On the flower, the job of the _____ is to attract insects.

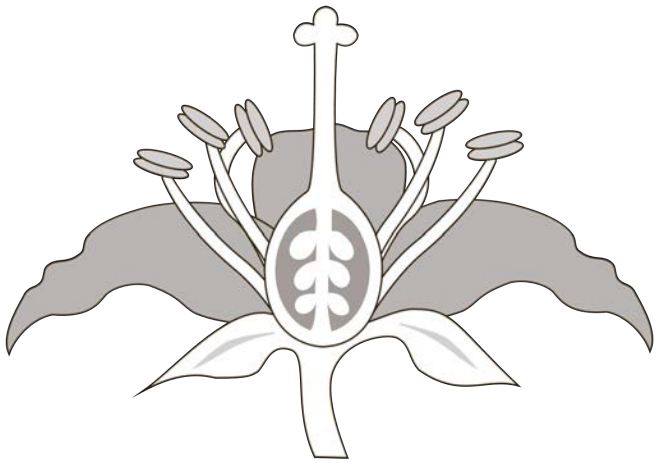
3. The stamen is where _____ is made.

4. The carpel is the part of the flower where _____ are made.

5. True or False:

There are male and female parts of a plant.

_____



Play a Video Game

Parts of a Flower

Name: _____

1. The sepal is the part of the flower that _____ flowers.

2. On the flower, the job of the _____ is to attract insects.

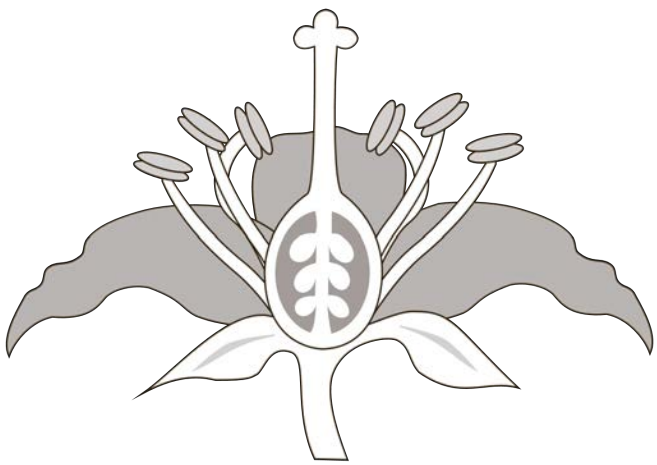
3. The stamen is where _____ is made.

4. The carpel is the part of the flower where _____ are made.

5. True or False:

There are male and female parts of a plant.

_____



Play

Video Game

Parts of a Flower

What does the sepal do?

#1

Play

Video Game

Parts of a Flower

What happens in the stamen?

#3

Play

Video Game

Parts of a Flower

What job do the petals have on a flower?

#2

Play

Video Game

Parts of a Flower

What happens in the carpel?

#4

#1 Play Video Game

Parts of a Flower

The sepal is the part of the flower that _____.

a. protects flowers
b. attracts insects
c. makes pollen
d. makes seeds

#3 Play Video Game

Parts of a Flower

The stamen is the part of the flower that _____.

a. protects flowers
b. attracts insects
c. makes pollen
d. makes seeds

#2 Play Video Game

Parts of a Flower

On the flower, the job of the petals is to _____.

a. protect flowers
b. attract insects
c. make pollen
d. make seeds

#4 Play Video Game

Parts of a Flower

The carpel is the part of the flower that _____.

a. protects flowers
b. attracts insects
c. makes pollen
d. makes seeds

Play a Video Game

Help a Plant Grow

Use your computer to play the video game at the following web address:

http://www.bbc.co.uk/schools/scienceclips/ages/7_8/plants_grow.shtml

Play a Video Game

Help a Plant Grow

Use your computer to play the video game at the following web address:

http://www.bbc.co.uk/schools/scienceclips/ages/7_8/plants_grow.shtml

Play a Video Game

Help a Plant Grow

Use your computer to play the video game at the following web address:

http://bit.ly/HelpaPlantGrow

Play a Video Game

Help a Plant Grow

Use your computer to play the video game at the following web address:

http://bit.ly/HelpaPlantGrow

Play a Video Game

Help a Plant Grow

Use your computer to play the video game at the following web address:

https://goo.gl/JZDE9a

Play a Video Game

Help a Plant Grow

Use your computer to play the video game at the following web address:

https://goo.gl/JZDE9a

Play a Video Game

Name: _____

Help a Plant Grow

1. What did it take to grow a healthy plant?

_____

_____

_____

2. What happens if you don't water your plant?

_____

_____

_____

3. What happens if you water your plant too much?

_____

_____

_____

4. What happens if you let the plant get too cold?

_____

_____

5. What happens if you let the plant get too hot?

_____

_____

_____

_____

6. Reset the experiment and press Grow. Pull the blinds down. What happens now?

_____

_____

_____

Play a Video Game

Help a Plant Grow

Name: _____

1. In this game you try to grow a healthy plant. To do this, you need the right amount of

_____ and _____.

2. If you don't water your plant, it _____.

3. If you water your plant too much, it _____.

4. If you let the plant get too cold, it _____.

5. If you let the plant get too hot, it _____.

6. Reset the experiment and press Grow. Pull the blinds down. Now the plants grow

_____ as they search for light. Eventually they

_____ .

Play a Video Game

Help a Plant Grow

Name: _____

1. In this game you try to grow a healthy plant. To do this, you need the right amount of

_____ and _____.

2. If you don't water your plant, it _____.

3. If you water your plant too much, it _____.

4. If you let the plant get too cold, it _____.

5. If you let the plant get too hot, it _____.

6. Reset the experiment and press Grow. Pull the blinds down. Now the plants grow

_____ as they search for light. Eventually they

_____ .

Play Video Game

Help a Plant Grow

What did it take to grow a healthy plant?

#1

Play Video Game

Help a Plant Grow

What happens if you water your plant too much?

#3

Play Video Game

Help a Plant Grow

What happens if you don't water your plant?

#2

Play Video Game

Help a Plant Grow

What happens if you let the plant get too cold?

#4

Play **Video Game**

Help a Plant Grow

What happens if you let the plant get too hot?

#5

Play **Video Game**

Help a Plant Grow

Play **Video Game**

Help a Plant Grow

Reset the experiment and press Grow. Pull the blinds down. What happens now?

#6

Play **Video Game**

Help a Plant Grow

#1 Play Video Game

Help a Plant Grow

What did it take to grow a healthy plant?

a. The right amount of heat
b. The right amount of water
c. The right amount of heat and water
d. none of the above

#3 Play Video Game

Help a Plant Grow

What happens if you water your plant too much?

a. It dries out, stops growing, and dies.
b. It hibernates until the water is gone.
c. The roots get swamped and the plant dies.
d. It grows tall and spindly, looking for dry soil.

#2 Play Video Game

Help a Plant Grow

What happens if you don't water your plant?

a. It dries out, stops growing, and dies.
b. It hibernates until it gets water.
c. The roots get swamped and the plant dies.
d. It grows tall and spindly, looking for water.

#4 Play Video Game

Help a Plant Grow

What happens if you let the plant get too cold?

a. It stops growing and dies.
b. It hibernates until it gets heat.
c. The roots get swamped and the plant dies.
d. It grows tall and spindly, looking for heat.

#5 Play Video Game

Help a Plant Grow

What happens if you let the plant get too hot?

a. It hibernates until it gets water.
b. It stops growing and dies.
c. The roots gets swamped and the plant dies.
d. It grows tall and spindly, looking for cold.

Play Video Game

Help a Plant Grow

#6 Play Video Game

Help a Plant Grow

Reset the experiment and press Grow. Pull the blinds down. What happens now?

a. It grows tall and spindly, looking for light.
b. It stops growing and dies.
c. It hibernates until it gets light.
d. a and b only
e. a and c only
f. a, b, and c

Play Video Game

Help a Plant Grow

Play a Video Game

Animal Life Cycles

Use your computer to play the video game at the following web address:

http://www.sheppardsoftware.com/scienceforkids/life_cycle/index.htm

Play a Video Game

Animal Life Cycles

Use your computer to play the video game at the following web address:

http://www.sheppardsoftware.com/scienceforkids/life_cycle/index.htm

Play a Video Game

Animal Life Cycles

Use your computer to play the video game at the following web address:

http://bit.ly/AnimalLifeCycles

Play a Video Game

Animal Life Cycles

Use your computer to play the video game at the following web address:

http://bit.ly/AnimalLifeCycles

Play a Video Game

Animal Life Cycles

Use your computer to play the video game at the following web address:

https://goo.gl/Ty4CAG

Play a Video Game

Animal Life Cycles

Use your computer to play the video game at the following web address:

https://goo.gl/Ty4CAG

Play a Video Game

Animal Life Cycles

Name: _____

1. For the butterfly life cycle, where did the butterfly lay her eggs?

_____

_____

2. After the caterpillar had eaten and gotten big, what did it do?

_____

_____

3. For the bird life cycle, what stage came first?

_____

_____

4. What does the newly hatched bird look like?

_____

_____

5. Until it can fly, where does the young bird live?

_____

_____

6. For the frog life cycle, what hatches out of the eggs?

_____

_____

7. How are newly hatched frogs different from adults?

_____

_____

8. What is the stage called right before the newly hatched frog becomes an adult frog?

_____

_____

Play a Video Game

Animal Life Cycles

Name: _____

1. For the butterfly life cycle, the butterfly laid her eggs on a _____.

2. After the caterpillar had eaten and gotten big, it made a _____.

3. For the bird life cycle, the first stage was the _____.

4. Unlike its parent, the newly hatched bird has no _____.

5. Until it can fly, the young bird lives in the _____.

6. For the frog life cycle, the _____ hatch out of the eggs.

7. Unlike its parent, a newly hatched frog has no _____, but it does have a long _____. It can only live in the _____.

Play a Video Game

Animal Life Cycles

Name: _____

1. For the butterfly life cycle, the butterfly laid her eggs on a _____.

2. After the caterpillar had eaten and gotten big, it made a _____.

3. For the bird life cycle, the first stage was the _____.

4. Unlike its parent, the newly hatched bird has no _____.

5. Until it can fly, the young bird lives in the _____.

6. For the frog life cycle, the _____ hatch out of the eggs.

7. Unlike its parent, a newly hatched frog has no _____, but it does have a long _____. It can only live in the _____.

Play Video Game

Animal Life Cycles

For the butterfly life cycle, where did the butterfly lay her eggs?

#1

Play Video Game

Animal Life Cycles

For the bird life cycle, which stage came first?

#3

Play Video Game

Animal Life Cycles

After the caterpillar had eaten and gotten big, what did it do?

#2

Play Video Game

Animal Life Cycles

What does the newly hatched bird look like?

#4

Play Video Game

Animal Life Cycles

Until it can fly, where does the young bird live?

#5

Play Video Game

Animal Life Cycles

How are newly hatched frogs different from adults?

#7

Play Video Game

Animal Life Cycles

For the frog life cycle, what hatches out of the eggs?

#6

Play Video Game

Animal Life Cycles

What is the stage called right before the newly hatched frog becomes an adult frog?

#8

#1 Play Video Game

Animal Life Cycles

For the butterfly life cycle, where did the butterfly lay her eggs?

a. in the water
b. under a rock
c. on a leaf
d. in a tree hole

#2 Play Video Game

Animal Life Cycles

When the caterpillar had eaten and gotten big, what did it do?

a. made a chrysalis or cocoon
b. crawled under a rock
c. found insects to eat
d. laid her eggs

#3 Play Video Game

Animal Life Cycles

For the bird life cycle, which stage came first?

a. chick
b. egg
c. learn to fly
d. find a mate

#4 Play Video Game

Animal Life Cycles

What does the newly hatched bird look like?

a. small, no feathers
b. growing bigger wings
c. big features beginning to grow
d. just like its parent

#5 Play Video Game

Animal Life Cycles

Until it can fly, where does the young bird live?

a. in the egg
b. in a pouch
c. in the nest
d. in the water

#7 Play Video Game

Animal Life Cycles

How are newly hatched frogs different from adults?

a. They cannot come out of the water.
b. They have legs.
c. They are fish.
d. They live in trees.

#6 Play Video Game

Animal Life Cycles

For the frog life cycle, what hatches out of the eggs?

a. froglet
b. fish
c. frog
d. tadpole

#8 Play Video Game

Animal Life Cycles

What is the stage called right before it becomes an adult frog?

a. egg
b. froglet
c. tadpole
d. fish

Investigate Ant vs. Praying Mantis

Materials

- Full color pictures of insect life cycles showing complete and incomplete metamorphosis
- Life Cycle Worksheet
- Markers or colored pencils

Instructions

A life cycle is all the changes that happen during a plant's or animal's life until they are fully grown adults. Some insects go through metamorphosis during their life cycle. When they hatch, the bodies of these insects make big changes before they become adults.

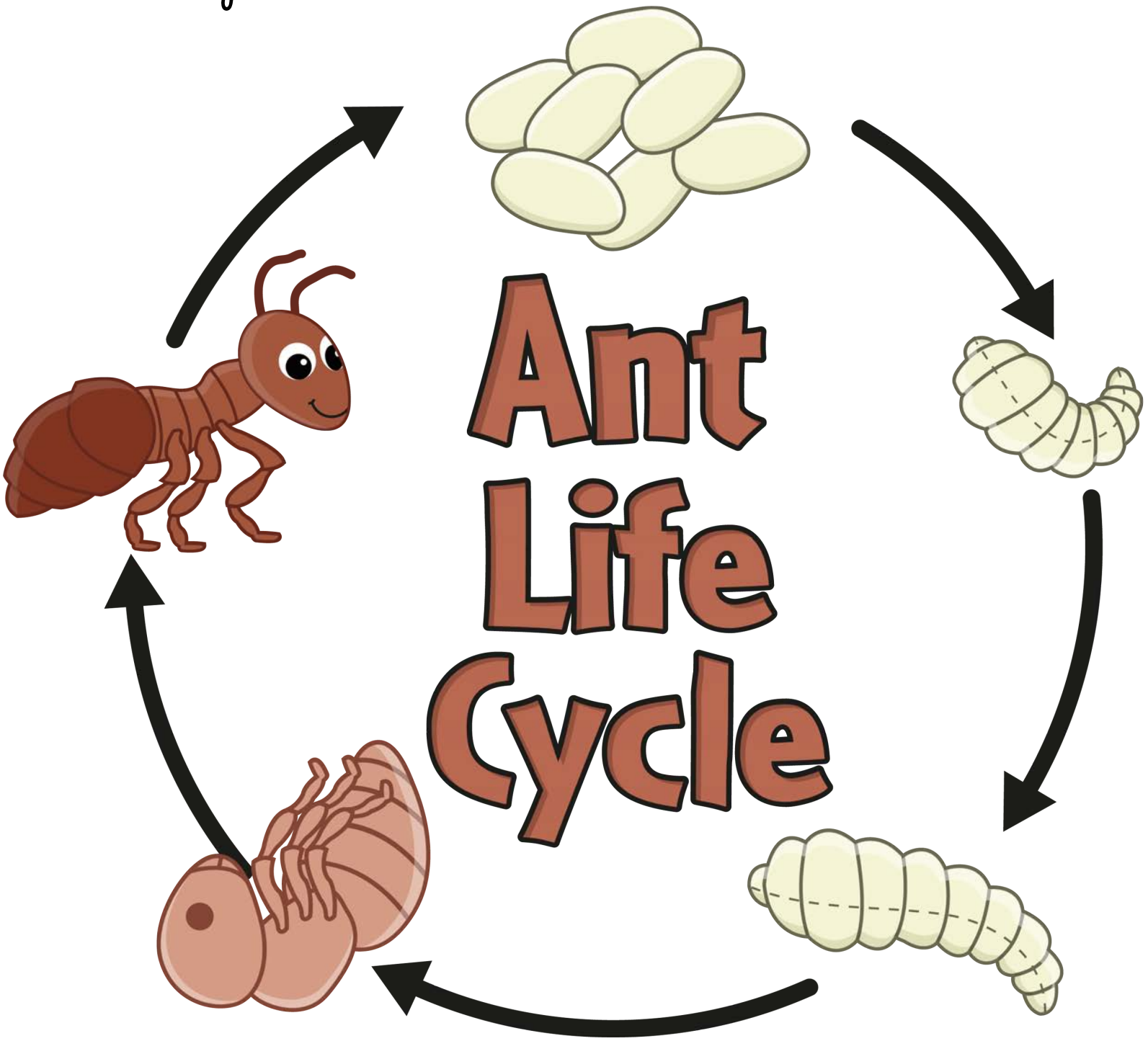
Some insects go through complete metamorphosis. This happens when their bodies completely changes during their life cycles. The newly hatched insects looks very different from the adult. Other insects go through incomplete metamorphosis. The newly hatched insect looks like the adult. It is smaller and has no wings.

Your worksheet shows these two types of life cycles. The picture of the ant life cycle shows complete metamorphosis. The picture of the praying mantis life cycle shows incomplete metamorphosis.

1. Color each phase of the life cycles.
2. Write the name of each stage of the life cycle next to its picture
3. Answer the questions.

Investigate Ant vs. Praying Mantis

Name: _____



Egg: A female ant lays her eggs.

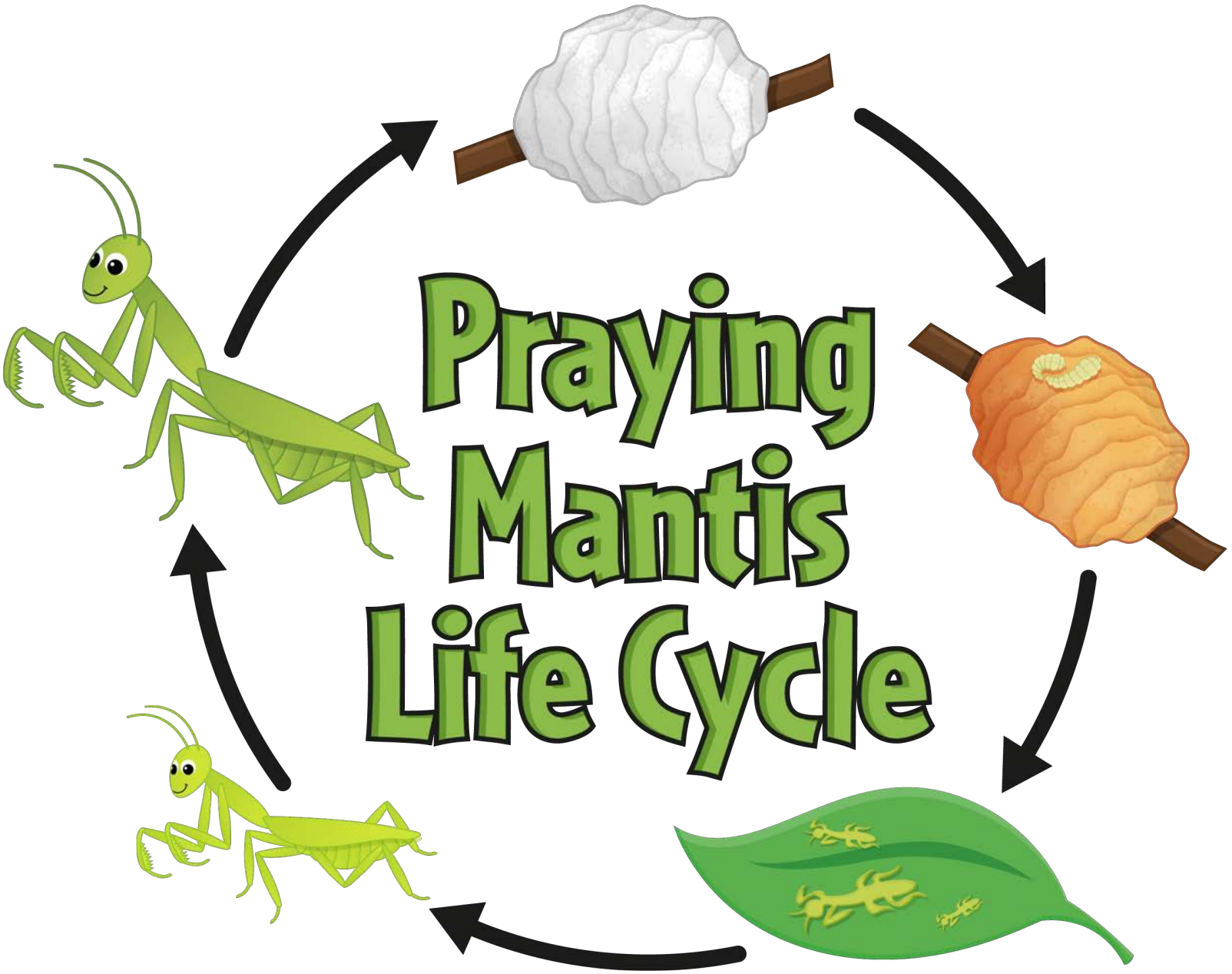
Larva: The larva hatches from the egg. It looks very different from an adult ant. The larva eats and grows.

Pupa: The larva is finished growing. It spins a cocoon around itself. It looks like it is resting, but really its body is going through big changes. It is changing from something that looks like a worm into its ant shape. It is growing a new body, legs, and eyes that look very different from the larva.

Adult: The pupa has finished all its changes inside the cocoon. The adult ant now has a body of a fully formed ant. It is ready to come out and begin the life cycle all over again.

Investigate Ant vs. Praying Mantis

Name: _____



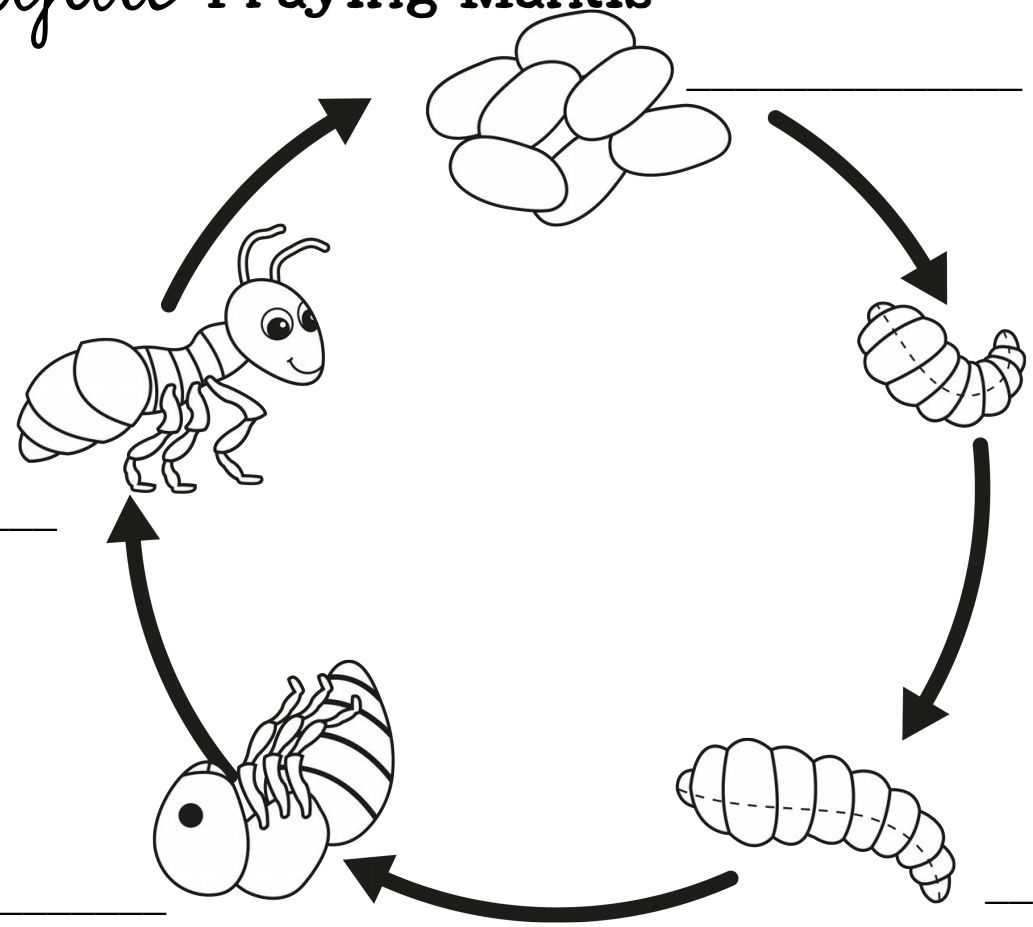
Egg: A female praying mantis lays her eggs.

Nymph: The nymph hatches from the egg. It looks similar to the adult praying mantis. It is smaller and has no wings. Like all insects, praying mantises have exoskeletons, which are a hard outer coverings on their bodies. The exoskeleton cannot get bigger, so when the nymph is growing, it molts, or sheds the exoskeleton and grows a new one.

Adult: The nymph molts for the last time. It now has wings and all the body parts of an adult praying mantis. It is ready to begin the life cycle all over again.

Investigate Ant vs. Praying Mantis

Name: _____



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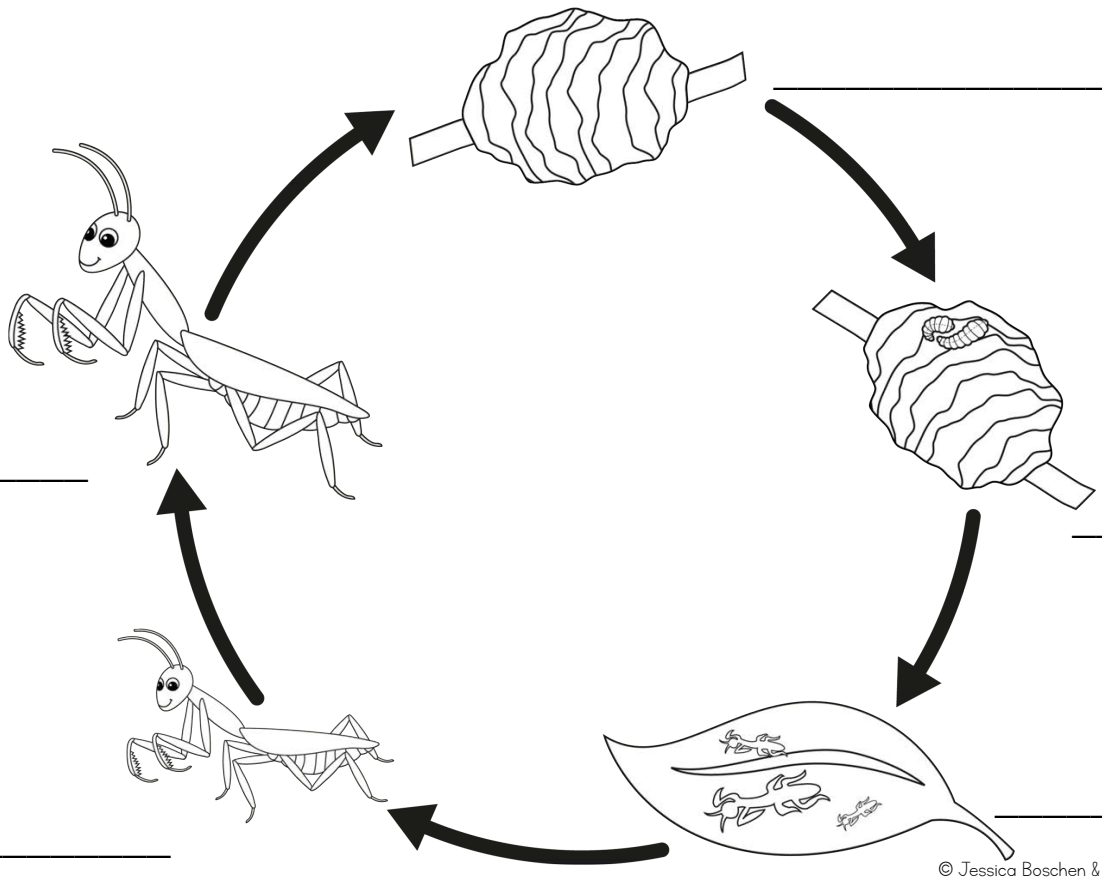

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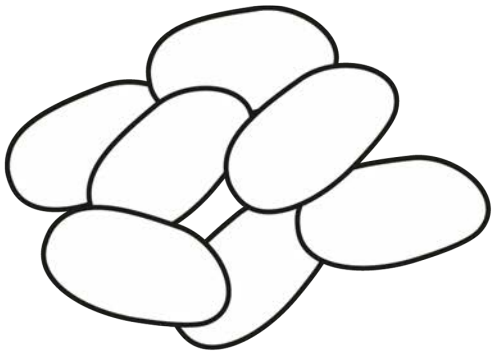
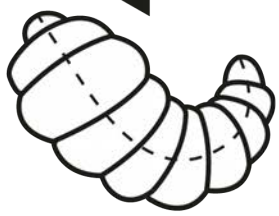
Investigate Ant vs. Praying Mantis

Name: _____

_____





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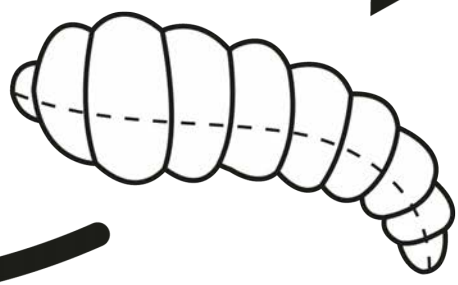

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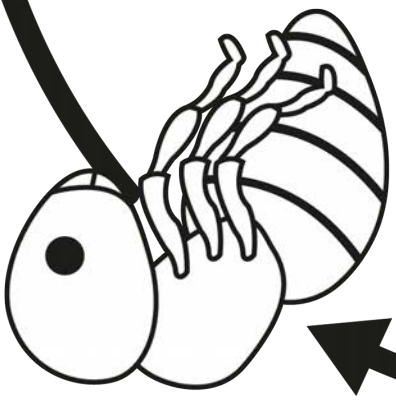

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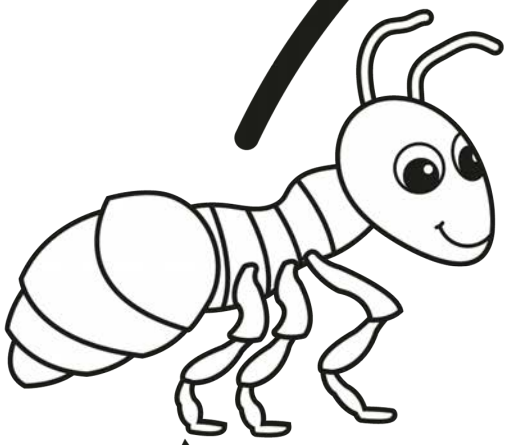

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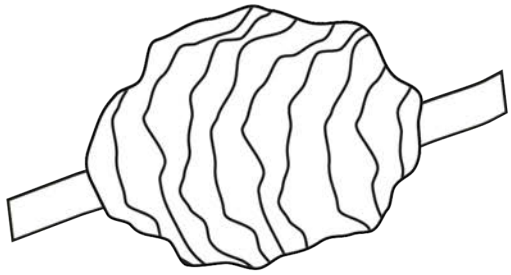
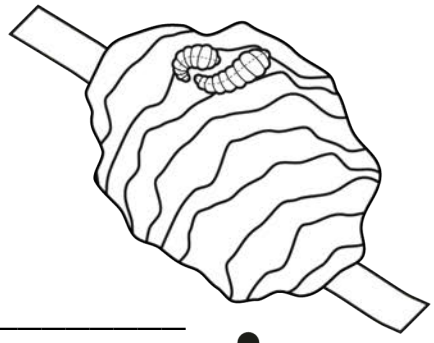
_____

Investigate Ant vs. Praying Mantis

Name: _____

_____





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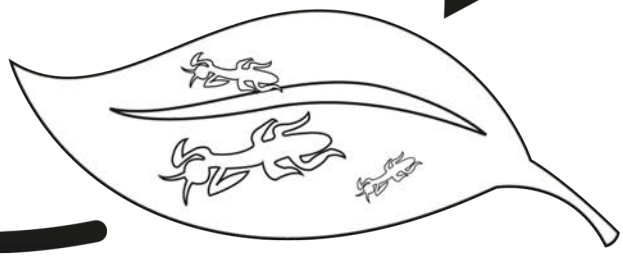

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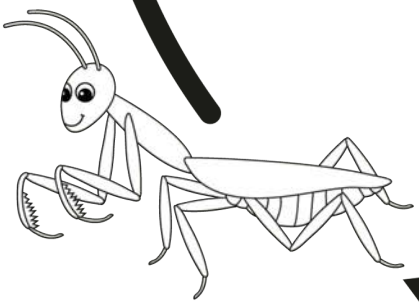

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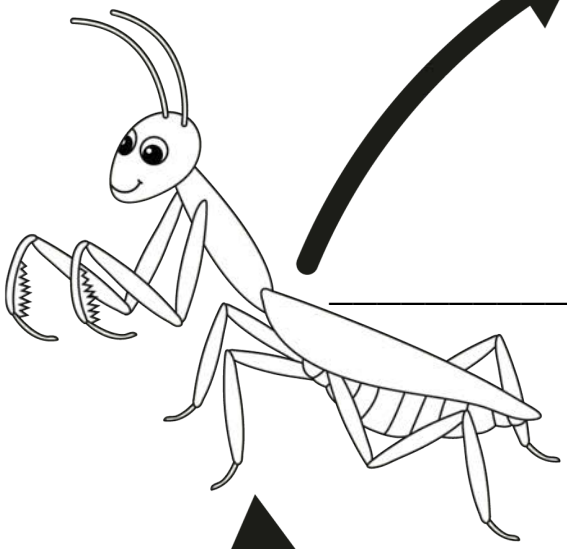


_____

Investigate Ant vs. Praying Mantis

Name: _____

1. List the stages of complete metamorphosis.

_____

_____

2.List the stages of incomplete metamorphosis.

_____

_____

3. How is a larva different from a nymph?

_____

_____

4. You watch an insect egg hatch. Something that looks like a little worm comes out. Will the insect go through incomplete metamorphosis or complete metamorphosis?

_____

_____

5. You watch an insect egg hatch. Something that looks like a small adult insect comes out. Will the insect go through incomplete metamorphosis or complete metamorphosis?

_____

_____

6. A cricket goes through incomplete metamorphosis. When it hatches from an egg, will it be a larva or a nymph?

_____

_____

7. A bee goes through complete metamorphosis. When it hatches from an egg, will it be a larva or a nymph?

_____

_____

Investigate Ant vs. Praying Mantis

Name: _____

1. The stages of complete metamorphosis are _____,

_____, _____, and _____.

2. The stages of incomplete metamorphosis are _____,

_____, and _____.

3. A _____ is the stage when the insect looks like a worm.

4. A _____ is the stage when the insect looks like a small adult, but is missing wings.

5. You watch an insect egg hatch. Something that looks like a little worm comes out. This insect will go through _____ metamorphosis.

6. You watch an insect egg hatch. Something that looks like a small adult insect comes out. The insect goes through _____ metamorphosis.

7. A cricket goes through incomplete metamorphosis. When it hatches from an egg, it will be in the _____ stage.

8. A bee goes through complete metamorphosis. When it hatches from an egg, it will be in the _____ stage.

Investigate Ant vs. Praying Mantis

Name: _____

1. The stages of complete metamorphosis are _____,

_____, _____, and _____.

2. The stages of incomplete metamorphosis are _____,

_____, and _____.

3. A _____ is the stage when the insect looks like a worm.

4. A _____ is the stage when the insect looks like a small adult, but is missing wings.

5. You watch an insect egg hatch. Something that looks like a little worm comes out. This insect will go through _____ metamorphosis.

6. You watch an insect egg hatch. Something that looks like a small adult insect comes out. The insect goes through _____ metamorphosis.

7. A cricket goes through incomplete metamorphosis. When it hatches from an egg, it will be in the _____ stage.

8. A bee goes through complete metamorphosis. When it hatches from an egg, it will be in the _____ stage.

Investigate

Ant vs. Praying Mantis

List the stages of complete metamorphosis.

#1

Investigate

Ant vs. Praying Mantis

How is a larva different from a nymph?

#3

Investigate

Ant vs. Praying Mantis

List the stages of incomplete metamorphosis.

#2

Investigate

Ant vs. Praying Mantis

You watch an insect egg hatch. Something that looks like a little worm comes out. Will the insect go through incomplete metamorphosis or complete metamorphosis?

#4

Investigate
Ant vs. Praying Mantis

You watch an insect egg hatch. Something that looks like a small adult insect comes out. Will the insect go through incomplete metamorphosis or complete metamorphosis?

#5

Investigate
Ant vs. Praying Mantis

A bee goes through complete metamorphosis. When it hatches from an egg, will it be a larva or a nymph?

#7

Investigate
Ant vs. Praying Mantis

A cricket goes through incomplete metamorphosis. When it hatches from an egg, will it be a larva or a nymph?

#6

Investigate
Ant vs. Praying Mantis

#8

#1 Investigate Ant vs. Praying Mantis

The order of the stages of complete metamorphosis are:

a. egg, pupa, adult
b. egg, nymph, adult
c. larva, nymph, adult
d. egg, larva, pupa, adult

#3 Investigate Ant vs. Praying Mantis

Which stage looks like a worm?

a. nymph
b. pupa
c. larva
d. egg

#2 Investigate Ant vs. Praying Mantis

The order of the stages of incomplete metamorphosis are:

a. egg, pupa, adult
b. egg, nymph, adult
c. larva, nymph, adult
d. egg, larva, pupa, adult

#4 Investigate Ant vs. Praying Mantis

Which stage looks like a small adult missing wings?

a. nymph
b. pupa
c. larva
d. egg

#5 Investigate Ant vs. Praying Mantis

You watch an insect egg hatch. Something that looks like a little worm comes out. What type of life cycle will it have?

a. complete metamorphosis
b. controlled metamorphosis
c. incomplete metamorphosis
d. external metamorphosis

#7 Investigate Ant vs. Praying Mantis

A cricket goes through incomplete metamorphosis.When it hatches from an egg, what stage will it be in?

a. adult
b. nymph
c. pupa
d. larva

#6 Investigate Ant vs. Praying Mantis

You watch an insect egg hatch. Something that looks like a little adult insect comes out. What type of life cycle will it have?

a. complete metamorphosis
b. controlled metamorphosis
c. incomplete metamorphosis
d. external metamorphosis

#8 Investigate Ant vs. Praying Mantis

A bee goes through complete metamorphosis. When it hatches from an egg, what stage will it be in?

a. adult
b. nymph
c. pupa
d. larva

Diagram

Animal Life Cycles

Using either the cut and paste worksheets or the colored cards, arrange the stages of the frog, turtle, salmon and chicken life cycle in the correct order.

Answer the questions about the diagrams.

Diagram

Animal Life Cycles

Using either the cut and paste worksheets or the colored cards, arrange the stages of the frog, turtle, salmon and chicken life cycle in the correct order.

Answer the questions about the diagrams.

Diagram Animal Life Cycle

Name: _____

Frog Life Cycle

The female frog lays her eggs in water. The eggs feed the baby frogs.The eggs also protect the baby frogs.

The eggs hatch. The tadpole swims out. It looks like a fish with fins and no legs. It lives only in water.

The tadpole is getting bigger. Tiny legs are beginning to grow. The tail grows smaller.

At this stage, it is a froglet. The tail is much smaller. The legs are growing bigger and stronger.

The frog is now an adult. It is ready to find a mate. Then it will make more eggs.

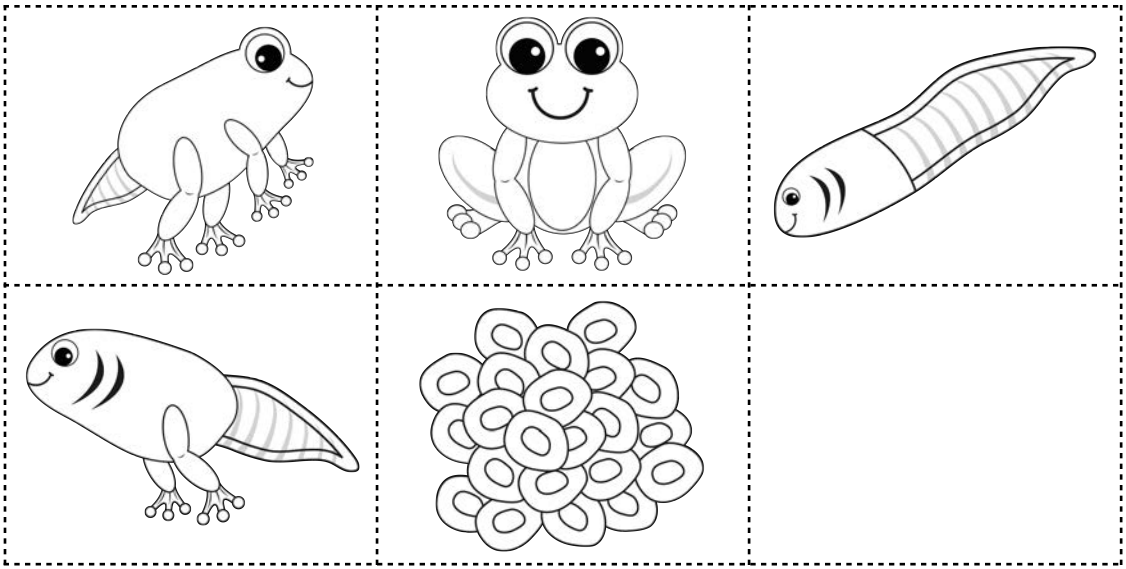


Diagram Animal Life Cycle

Name: _____

Sea Turtle Life Cycle

The female sea turtle lays her eggs. The eggs are in a nest. She dug the nest in the sand. The eggs have food for the babies. The eggs also protect the babies.

The eggs begin to hatch. The baby sea turtle has a special tooth to help it get out of the egg.

The sea turtle comes out of the egg. The baby sea turtle digs up out of the sand nest. It crawls to the ocean and swims away.

The sea turtle lives in the ocean. It swims, eats fish, and grows.

The turtle is now an adult. It is ready to find a mate. Then they will make more eggs.

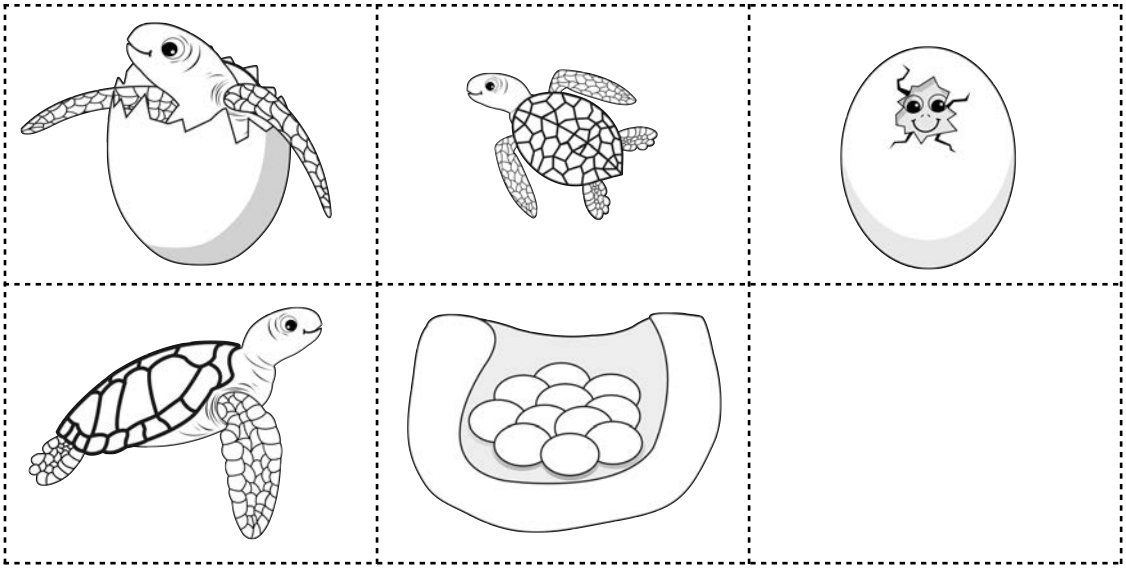


Diagram Animal Life Cycle

Name: _____

Chicken Life Cycle

The hen lays her egg in a nest. The egg has food for the chick. The egg also protects the growing chick.

The hen sits on the egg to keep it warm. She protects it from danger. She turns the egg often. This moves the food in the egg so the chick can find it.

The chick pecks a hole in the egg. The hole gets bigger and bigger.

The chick then pushes through the shell. It comes out and dries off. After the chick rests, it eats grass, seeds, and bugs. It grows and grows. In a few months it will be fully grown.

The chicken is now an adult ready to find a mate. Then it will make more eggs.

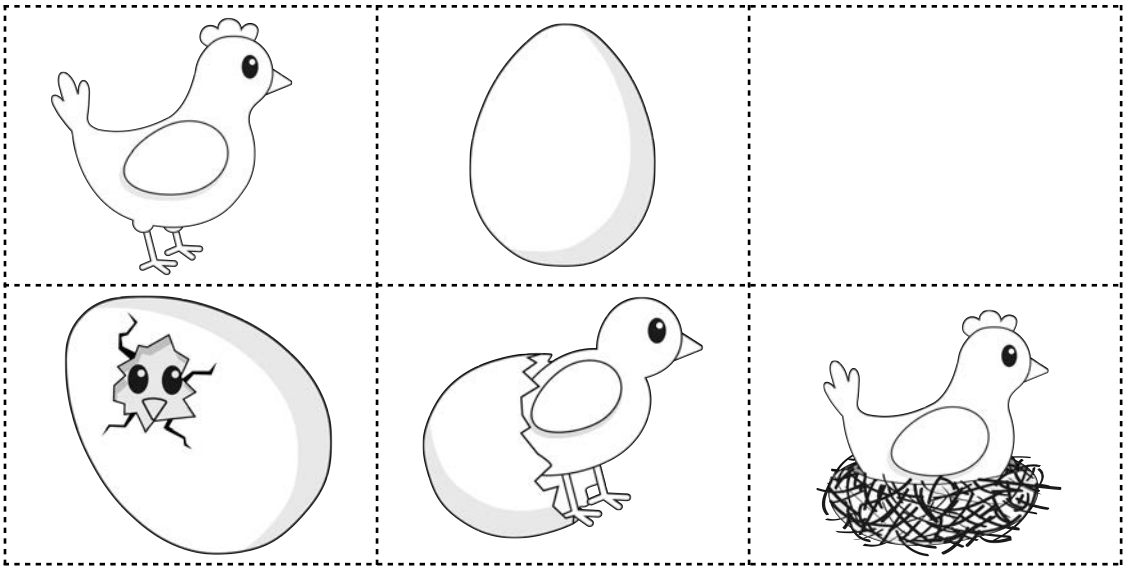


Diagram Animal Life Cycle

Name: _____

Salmon Life Cycle

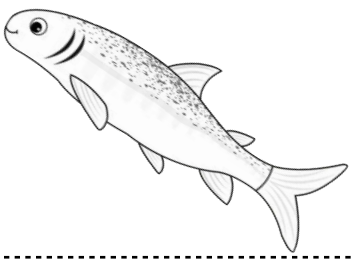
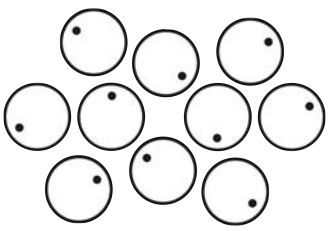
The female salmon lays her eggs in a river. The male fertilizes the eggs. They bury the eggs in the river bottom. The eggs have food for the babies. The eggs also protect the babies.

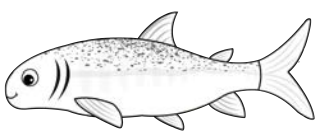
The eggs hatch. The baby salmon live in the sand for a few months. They eat and grows. Soon they are big enough to begin swimming in the river.

The young salmon swims to the sea. It eats and grows in the ocean. It lives in the ocean for more than a year.

The salmon is almost fully grown. It begins to swim back to the river where it was hatched. It is still eating and growing in the sea.

The salmon is now an adult. It found the river where it was hatched. The salmon finds a safe place for eggs.

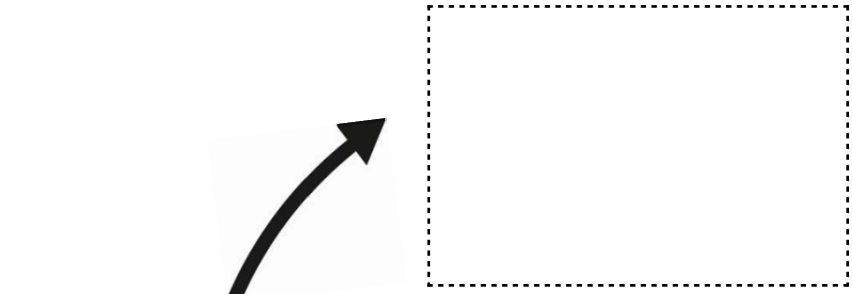






Diagram

Animal Life Cycles

Frog Life Cycle



The female frog lays her eggs in water. The eggs feed the baby frogs.The eggs also protect the baby frogs.

The eggs hatch. The tadpole swims out. It looks like a fish with fins and no legs. It lives only in water.

The tadpole is getting bigger. Tiny legs are beginning to grow. The tail grows smaller.

At this stage, it is a froglet. The tail is much smaller. The legs are growing bigger and stronger.

The frog is now an adult. It is ready to find a mate. Then it will make more eggs.

Diagram

Animal Life Cycles

Sea Turtle Life Cycle

The female sea turtle lays her eggs. The eggs are in a nest. She dug the nest in the sand. The eggs have food for the babies. The eggs also protect the babies.

The eggs begin to hatch. The baby sea turtle has a special tooth to help it get out of the egg.

The sea turtle comes out of the egg. The baby sea turtle digs up out of the sand nest. It crawls to the ocean and swims away.

The sea turtle lives in the ocean. It swims, eats fish, and grows.

The turtle is now an adult. It is ready to find a mate. Then they will make more eggs.

Diagram

Animal Life Cycles

Chicken Life Cycle

The hen lays her egg in a nest. The egg has food for the chick. The egg also protects the growing chick.

The hen sits on the egg to keep it warm. She protects it from danger. She turns the egg often. This moves the food in the egg so the chick can find it.

The chick pecks a hole in the egg. The hole gets bigger and bigger.

The chick then pushes through the shell. It comes out and dries off. After the chick rests, it eats grass, seeds, and bugs. It grows and grows. In a few months it will be fully grown.

The chicken is now an adult ready to find a mate. Then it will make more eggs.

Diagram

Animal Life Cycles

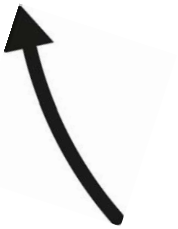
Salmon Life Cycle

The female salmon lays her eggs in a river. The male fertilizes the eggs. They bury the eggs in the river bottom. The eggs have food for the babies. The eggs also protect the babies.

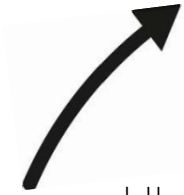
The eggs hatch. The baby salmon live in the sand for a few months. They eat and grows. Soon they are big enough to begin swimming in the river.

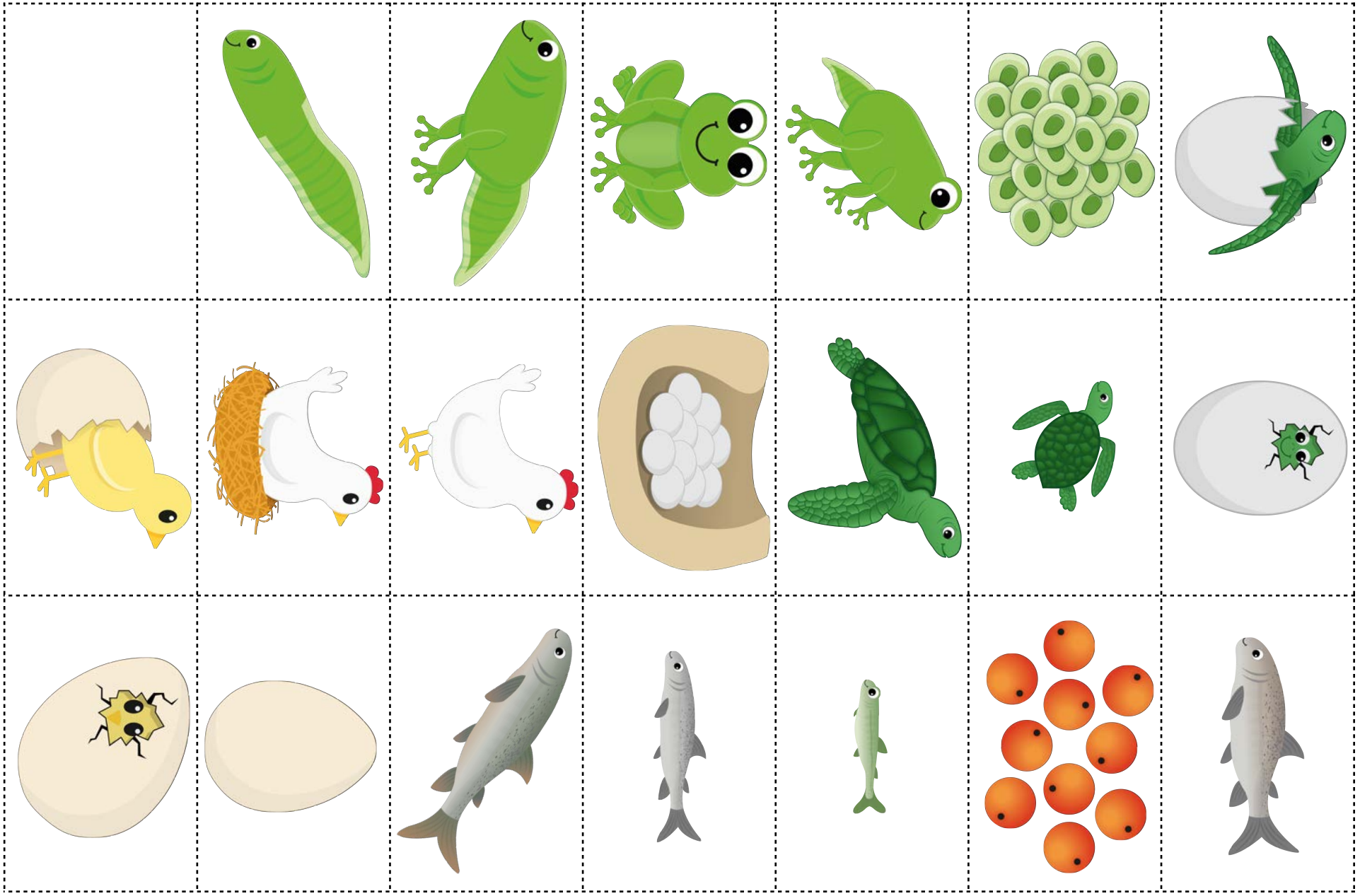
The young salmon swims to the sea. It eats and grows in the ocean. It lives in the ocean for more than a year.

The salmon is almost fully grown. It begins to swim back to the river where it was hatched. It is still eating and growing in the sea.



The salmon is now an adult. It found the river where it was hatched. The salmon finds a safe place for eggs.





Laminate the paper and cut out the cards. Use the color Diagram sheets and have students sort the cards.

Diagram Animal Life Cycles

Name: _____

1. How do the life cycle of all these animals begin?

_____

_____

_____

2. What does the egg do?

_____

_____

_____

3. While the baby is growing in the egg, which of the 4 mothers takes the most care of the egg? Why does she take care of her egg?

_____

_____

_____

_____

4. When the egg is hatched, which of these four animals looks most like the adult?

_____

_____

_____

5. When the egg is hatched, which of these four animals looks least like the adult?

_____

_____

_____

Diagram Animal Life Cycles

Name: _____

1. The life cycle of all these animals begins at the _____ stage.

2. The job of an egg is to _____ and _____.

3. While the baby is growing in the egg, one mother took great care with the egg. This animal was the _____. She took great care of her egg for these reasons:

_____

_____

_____

4. When the egg is hatched, the animal that looked most like its parent is the _____.

5. When the egg is hatched, the animal that looked least like its parent is the _____.

Diagram Animal Life Cycles

Name: _____

1. The life cycle of all these animals begins at the _____ stage.

2. The job of an egg is to _____ and _____.

3. While the baby is growing in the egg, one mother took great care with the egg. This animal was the _____. She took great care of her egg for these reasons:

_____

_____

_____

4. When the egg is hatched, the animal that looked most like its parent was the _____.

5. When the egg is hatched, the animal that looked least like its parent was the _____.

Diagram

Animal Life Cycles

How does the life cycle of all these animals begin?

#1

Diagram

Animal Life Cycles

While the baby is growing in the egg, which of the 4 mothers takes the most care of the egg? Why does she take care of her egg?

#3

Diagram

Animal Life Cycles

What does the egg do?

#2

Diagram

Animal Life Cycles

When the egg is hatched, which of these four animals looks most like the adult? When the egg is hatched, which of these four animals looks least like the adult?

#4

#1 Diagram

Animal Life Cycles

How does the life cycle of all these animals begin?

a. adult
b. egg
c. newly hatched baby
d. growing animal

#2 Diagram

Animal Life Cycles

What does the egg do?

a. give food to the baby
b. move the baby to a safe place
c. protect the mother
d. keep the baby warm

#3 Diagram

Animal Life Cycles

While the baby is growing in the egg, which of the 4 mothers takes the most care of the egg?

a. frog
b. sea turtle
c. chicken
d. salmon

#4 Diagram

Animal Life Cycles

Look at your answer to #3.
Why did the mother take care of her egg?

a. to keep it warm
b. to move food in the egg to the growing animal
c. to protect the baby animal from danger
d. all of the above

#5 Diagram

Animal Life Cycles

When the egg is hatched, which of these four animals looks most like the adult?

a. frog
b. sea turtle
c. chicken
d. salmon

#6 Diagram

Animal Life Cycles

When the egg is hatched, which of these four animals looks least like the adult?

a. frog
b. sea turtle
c. chicken
d. salmon

#7 Diagram

Animal Life Cycles

#8 Diagram

Animal Life Cycles

Read Migrating Geese

Many birds move to a different place, or habitat, when the weather turns cold. This is called migration. The birds migrate to a habitat that is warmer. Warmer habitats have more food to eat. In spring, the birds will begin their journey again. They migrate back to where they live in the summer.

One bird that migrates every year is the Canada Goose. In the spring, Canada Geese fly together in V formation. Their flock, or group of geese, fly together in the shape of a V in the sky. After many miles, they finally get to their summer home.

The male is called a gander and the female is called a goose. The gander and goose find a good place for their nest. The goose builds the nest. The gander guards the nest.

The goose lays her egg and sits on it for about one month. When the baby goose is hatched, it is called a gosling. It has soft, fluffy yellow feathers called down. As soon as it hatches, the gosling can walk and swim, but it cannot fly. The gosling spends the next several months eating and growing. Darker grey feathers begin to grow in. The gosling learns how to fly. By autumn, it will be fully grown and able to fly. It is now ready to migrate to a warmer place for winter.

When the weather becomes cold, there is less food available to eat. Canada Geese fly together in the same V formation back to their winter homes. There they will find plenty of grass, seeds, and berries to eat. They stay together in flocks at their winter home.

Read Migrating Geese

Name: _____

1. Why do birds migrate?

2. What shape does a flock of geese make when they fly in the sky?

3. When they get to their summer home, what does the goose do? What does the gander do?

4. What does the gosling look like?

5. When the gosling hatches, can it walk? Can it swim? Can it fly? What can it do by autumn?

6. What will the geese do at their winter homes?

Read Migrating Geese

Name: _____

1. Birds migrate to a _____ habitat in order to find _____.

2. The shape a flock of geese makes when they fly in the sky is a _____ shape.

3. When they get to their summer home, the goose _____ the nest and the gander _____ the nest.

4. The gosling has feathers that look _____ and are called _____.

5. When the gosling hatches, is can _____ and _____, but it cannot _____.

6. By autumn, the gosling is able to _____.

7. At their winter homes the geese will eat _____. They will stay together in _____.

Read Migrating Geese

Name: _____

1. Birds migrate to a _____ habitat in order to find _____.

2. The shape a flock of geese makes when they fly in the sky is a _____ shape.

3. When they get to their summer home, the goose _____ the nest and the gander _____ the nest.

4. The gosling has feathers that look like _____ and are called _____.

5. When the gosling hatches, is can _____ and _____, but it cannot _____.

6. By autumn, the gosling is able to _____.

7. At their winter homes the geese will eat _____. They will stay together in _____.

Read **Migrating Geese**

Why do birds migrate?

#1

Read **Migrating Geese**

When they get to their summer home, what does the goose do? What does the gander do?

#3

Read **Migrating Geese**

What shape does a flock of geese make when they fly in the sky?

#2

Read **Migrating Geese**

What does the gosling look like?

#4

Read **Migrating Geese**

When the gosling hatches, can it walk? Can it swim? Can it fly?

#5

Read **Migrating Geese**

What will the geese do at their winter homes?

#7

Read **Migrating Geese**

What can the gosling do by autumn?

#6

Read **Migrating Geese**

#4

#1 Read **Migrating Geese**

Why do birds migrate?

a. to find a mate
b. to find food
c. to learn about snow
d. to learn to fly

#2 Read **Migrating Geese**

What shape does a flock of geese make when they fly in the sky?

a. V formation
b X formation
c. a nest shape
d. a circle shape

#3 Read **Migrating Geese**

When they get to their summer home, what does the goose do?

a. learn to swim
b. guard the nest
c. build the nest
d. teach the gosling to fly

#4 Read **Migrating Geese**

What does the gander do?

a. learn to swim
b. guard the nest
c. build the nest
d. teach the gosling to fly

#5 Read **Migrating Geese**

What does the gosling look like?

a. soft, yellow feathers
b. big, yellow feathers
c. big, grey feathers
d. soft, grey feathers

#7 Read **Migrating Geese**

What can the gosling do by autumn?

a. swim
b. walk
c. fly
d. all of the above

#6 Read **Migrating Geese**

When the gosling hatches, what can it not do?

a. swim
b walk
c. fly
d. all of the above

#8 Read **Migrating Geese**

What will the geese do at their winter homes?

a. eat grass, berries, seeds
b. build a nest
c. live in flocks
d. a and b only
e. a and c only
f. a, b, and c

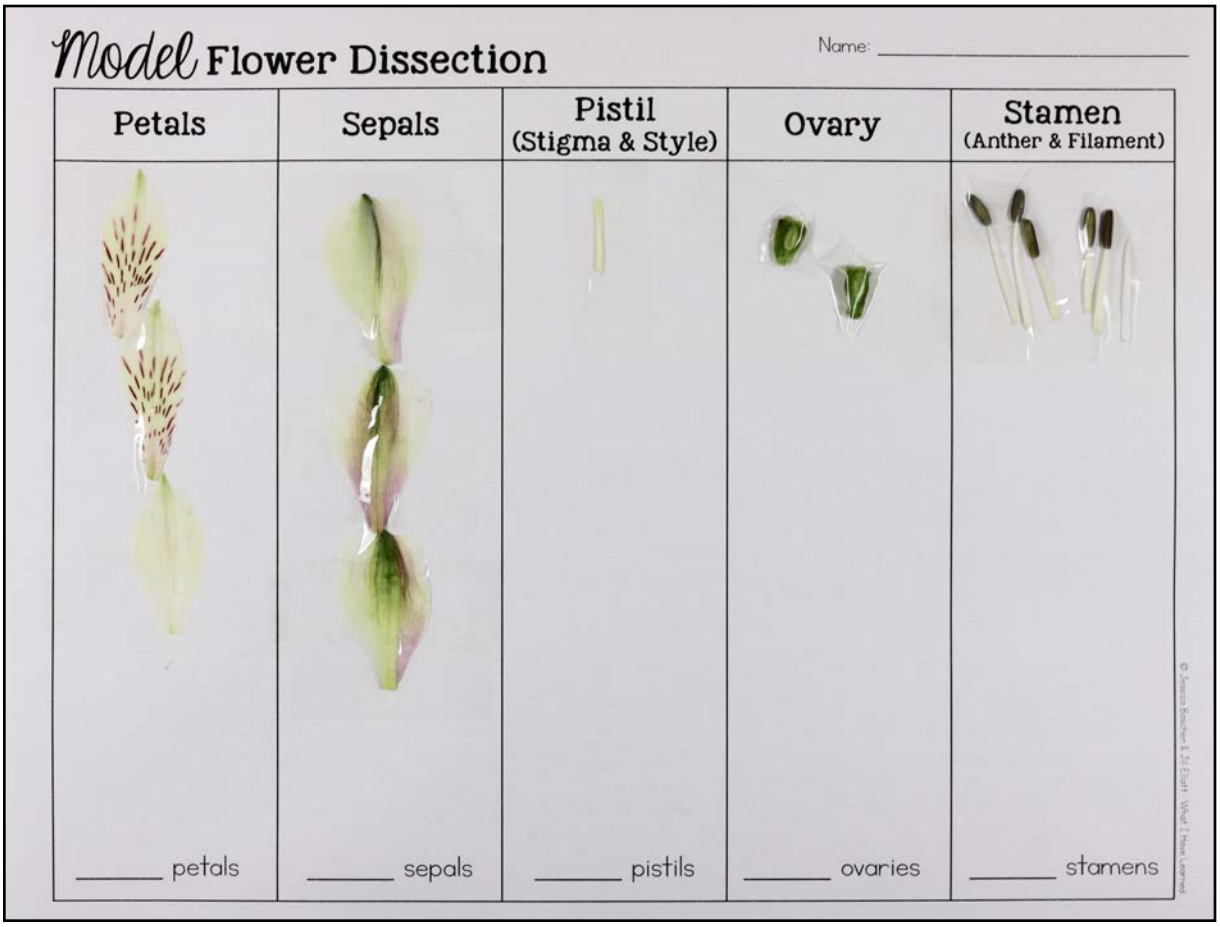
Model Flower Dissection Teacher Notes

Materials

- Student worksheets
- Scissors
- Peruvian Lily (Alstroemeria), or any other flower with clear male and female reproductive parts, 1 per student
- Clear plastic tape (Scotch tape)
- Labeled Diagram of Flower

Teacher Hints

When students tape the structures on their charts, the tape should completely cover the structures. This will preserve the flower on the paper long enough to be able to keep it in the students' science notebooks.



Model Flower Dissection Student Instructions

Materials

- Student worksheets
- Scissors
- Peruvian Lily (Alstroemeria), or any other flower with clear male and female reproductive parts, 1 per student
- Clear plastic tape (Scotch tape)
- Labeled Diagram of Flower

Student Directions

1. Find the sepals of your flower. With your scissors, carefully cut off the sepals. Tape them in the Sepals column of your chart. Make sure the tape completely covers the sepal. Use more than one piece if necessary.

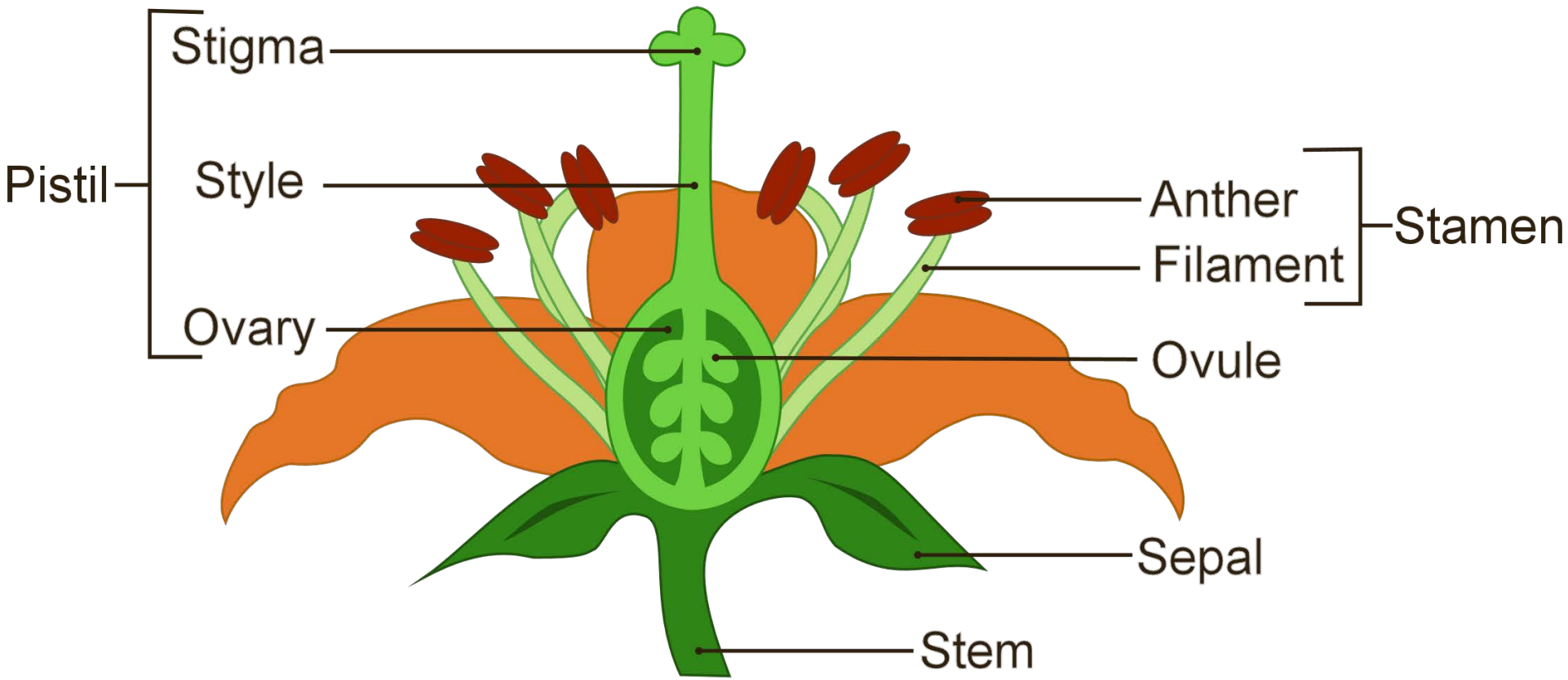
2. Record the number of sepals on your chart.

3. Repeat this with the rest of the parts of the flower. Tape them carefully in their appropriate columns on your chart.

4. Record the number of each structure on your chart.

Model

Flower Dissection Diagram



Model Flower Dissection

Name: _____

Sepals	Petals	Pistil (Stigma & Style)	Ovary	Stamen (Anther & Filament)
_____ sepals	_____ petals	_____ pistils	_____ ovaries	_____ stamens

Model Flower Dissection

Name: _____

1. Petals attract insects to the plant for pollination. How do the petals on your flower help with this?

_____

_____

_____

_____

2. The bud is the flower before it opens. The sepal protects the bud. How does your sepal look different from the petal?

_____

_____

_____

_____

3. Stamens make pollen. Insects land on the flower and take pollen off the stamen. Insects then move the pollen to another flower. How does the shape of the stamen help an insect to do this?

_____

_____

_____

_____

4. Pollen lands on the pistil. Pollen makes seeds in the ovary. Why is it important that the pistil is attached to the ovary?

_____

_____

_____

_____

Model Flower Dissection

Name: _____

1. Petals attract insects to the plant for pollination. The _____ of the petal makes the insect want to come to it.

2. The bud is the flower before it opens. The sepal protects the bud. How does your sepal look different from the petal?

_____

3. Stamens make pollen. Insects land on the flower and take pollen off the stamen. Insects then move the pollen to another flower. The stamen helps an insect do this by _____ pollen on it.

4. Pollen lands on the pistil. Pollen makes seeds in the ovary. It is important that the pistil is _____ the ovary so that the pollen has a way to get to the ovary.

Model Flower Dissection

Name: _____

1. Petals attract insects to the plant for pollination. The _____ of the petal makes the insect want to come to it.

2. The bud is the flower before it opens. The sepal protects the bud. How does your sepal look different from the petal?

_____

3. Stamens make pollen. Insects land on the flower and take pollen off the stamen. Insects then move the pollen to another flower. The stamen helps an insect do this by _____ pollen on it.

4. Pollen lands on the pistil. Pollen makes seeds in the ovary. It is important that the pistil is _____ the ovary so that the pollen has a way to get to the ovary.

Model **Flower Dissection**

Petals attract insects to the plant for pollination. How do the petals on your flower help with this?

#1

Model **Flower Dissection**

Stamens make pollen. Insects land on the flower and take pollen off the stamen. Insects then move the pollen to another flower. How does the shape of the stamen help an insect do this?

#3

Model **Flower Dissection**

The bud is the flower before it opens. The sepal protects the bud. How does your sepal look different from the petal?

#2

Model **Flower Dissection**

Pollen lands on the pistil. Pollen makes seeds in the ovary. Why is it important that the pistil is attached to the ovary?

#4

#1 Model Flower Dissection

Petals attract insects to the plant for pollination. How do the petals on your flower help with this?

a. The color of the petal makes the insect want to come to it.
b. They catch the insect inside it.
c. They look like an insect.
d. The shape of it tricks insects into thinking it's another insect.

#2 Model Flower Dissection

The bud is the flower before it opens. The sepal protects the bud. How does your sepal look different from the petal?

#3 Model Flower Dissection

Stamen make pollen. Insects land on the flower and take pollen off the stamen. Insects then move the pollen to another flower. How does the shape of the stamen help an insect do this?

a. The stamens are short enough to stay out of the way.
b. The long stamens will rub on an insect because they are tall and somewhat flexible.
c. The stamens are shaped like an insect to trick it into making a friend.
d. The stamens are right by the ovaries, which is a trap for the insect.

#4 Model Flower Dissection

Pollen lands on the pistil. Pollen makes seeds in the ovary. Why is it important that the pistil is attached to the ovary?

a. The pistil attracts ovaries to it.
b. The pistil works with the petals to move the pollen.
c. The ovaries attract the pollen with their scent.
d. So that the pollen has a way to get to the ovary.

Explore What Part of the Plant Do We Eat?

Teacher Notes

Materials:

- Student Charts
- Completed Student Chart in an envelope so that students can check their answers
- Assorted fruits and vegetables, arranged on a tray. Label them with the name of the fruit or vegetable, but not the part of the plant. (Ex: Carrot, Apple)
  - 2 or more Flower plants (broccoli, cauliflower, artichoke, asparagus tops)
  - 2 or more Root plants (carrots, beets, parsnips, etc.) Note: Potatoes are tubers, which are technically part of the stem of the plant. You could use potatoes in this activity as a way to introduce tubers and stems that are underground.
  - 2 or more Leaf plants (lettuce, spinach, cabbage, brussel sprouts) Note: You could bring the greens off beets, turnips, etc., and explain that sometimes we eat many parts of the plants.
  - 2 or more Stem plants (asparagus stems, celery, rhubarb, bok choy)
  - 2 or more Fruit plants (apple, peppers, tomato, squash, eggplant, cucumber) Note: You might want to bring in fruit that are often called "vegetables," such as green peppers and tomatoes. Remind your students that if there are seeds in it, then it is a fruit.
  - 2 or more Seed plants (corn, peas, beans, sunflower seeds)

Teacher Notes

Avoid using nuts, as they are either seeds or fruit, depending on their species. It isn't easy to distinguish between nuts that are seeds and nuts that are fruit just by looking at them.

Choose a plant from which you can use two parts: Beets + Beet Greens (root and leaf), Asparagus (stem and flower. Artichokes are interesting because they are actually flower buds.)

Explore

What Part of the Plant Do We Eat?

Student Instructions

Materials:

- Charts
- Completed Chart in an envelope to check answers
- Assorted fruits and vegetables, arranged on a tray

Student Instructions

In front of you are many fruits and vegetables. They are all from parts of the plants that we can eat. On your chart, record which part of the plant (flower, root, leaf, stem, fruit, seed) you think each fruit or vegetable is. When you are finished, open the envelope and check your answers. Correct your chart. Answer the questions at the bottom of the page.

Explore

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Explore What Part of the Plant Do We Eat?

Name: _____

Record which part of the plant you think each fruit or vegetable is.

Name of the Plant	Flower	Root	Stem	Fruit	Seed	Leaf

Explore

What Part of the Plant Do We Eat?

Name: _____

1. Look at the plants listed on your chart. Are there plants that you call vegetables that are actually fruit? If so, which ones?

_____

_____

_____

_____

_____

2. What makes something a fruit?

_____

_____

_____

_____

_____.

3. Name a fruit food that is not on your chart. Why is it a fruit?

_____

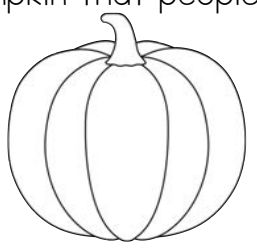
_____

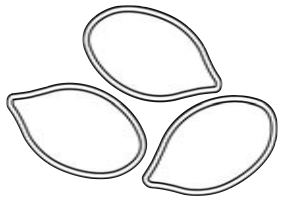
4. Name a root food that is not on your chart. Why is it a root?

_____

_____

5. People can eat three different parts of the pumpkin plant. Look at the pictures of the parts of the pumpkin that people eat. Tell what part of the plant is pictured.





_____ _____ _____

Explore

What Part of the Plant Do We Eat?

Name: _____

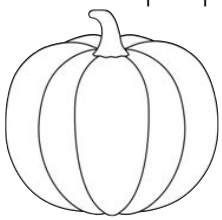
1. Look at the plants listed on your chart. The plants that you call vegetables but are actually fruit are _____.

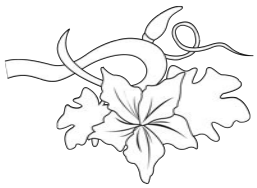
2. The fruit is the part of the plant that has _____.

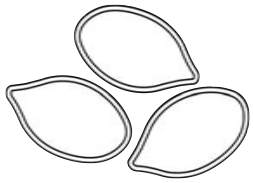
3. A fruit food that is not on your chart is _____.

4. A root food that is not on your chart is _____.

5. People can eat three different parts of the pumpkin plant. Look at the pictures of the parts of the pumpkin that people eat. Draw lines to match the picture with the name of the part of the plant.







seed fruit flower

Explore

What Part of the Plant Do We Eat?

Name: _____

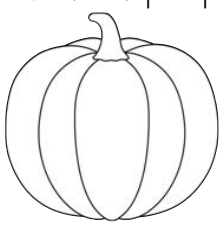
1. Look at the plants listed on your chart. The plants that you call vegetables but are actually fruit are _____.

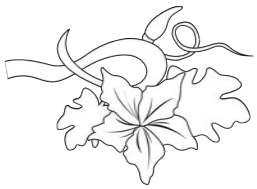
2. The fruit is the part of the plant that has _____.

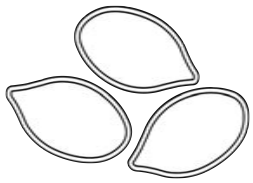
3. A fruit food that is not on your chart is _____.

4. A root food that is not on your chart is _____.

5. People can eat three different parts of the pumpkin plant. Look at the pictures of the parts of the pumpkin that people eat. Draw lines to match the picture with the name of the part of the plant.







seed fruit flower

Explore

What Part of the Plant Do We Eat?

Look at the plants listed on your chart. Are there plants that you call vegetables that are actually fruit? If so, which ones?

#1

Explore

What Part of the Plant Do We Eat?

What makes something a fruit?

#2

Explore

What Part of the Plant Do We Eat?

Name a fruit food that is not on your chart. Why is it a fruit?

#3

Explore

What Part of the Plant Do We Eat?

Name a root food that is not on your chart. Why is it a root?

#4

#1 Explore **What Part of the Plant Do We Eat?**

Which of these plant parts is a fruit?

a. broccoli
b. celery
c. tomato
d. carrot

#3 Explore **What Part of the Plant Do We Eat?**

Which of these plant parts is a stem?

a. broccoli
b. celery
c. tomato
d. carrot

#2 Explore **What Part of the Plant Do We Eat?**

The fruit is the part of the plant that has _____.

a. seeds
b. flowers
c. leaves
d. stems

#4 Explore **What Part of the Plant Do We Eat?**

Which of these plant parts is a flower?

a. broccoli
b. celery
c. tomato
d. carrot

Sort Plant Life Cycle

Identify the stage of the plant life cycle for each plant.

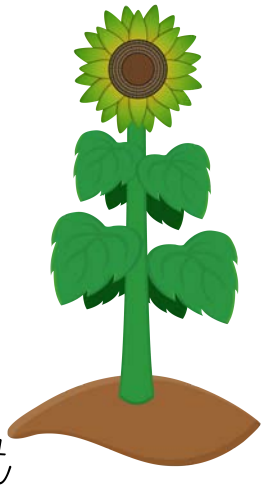
Sort Plant Life Cycle

Identify the stage of the plant life cycle for each plant.

Apple

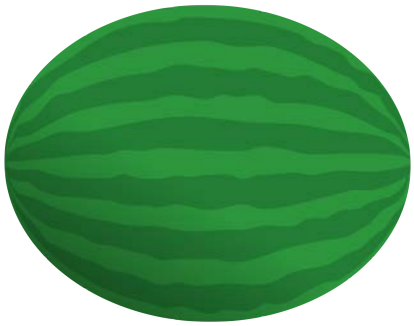
Sort
Plant Life Cycle

Sunflower



Sort
Plant Life Cycle

Watermelon



Sort
Plant Life Cycle

Pumpkin

Sort
Plant Life Cycle

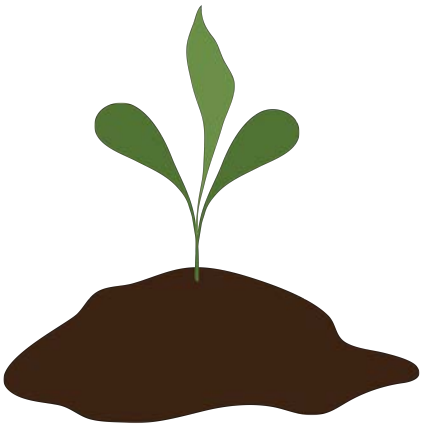
Watermelon

Sort
Plant Life Cycle

Pumpkin

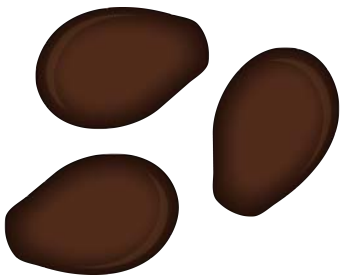
Sort
Plant Life Cycle

Apple



Sort
Plant Life Cycle

Watermelon

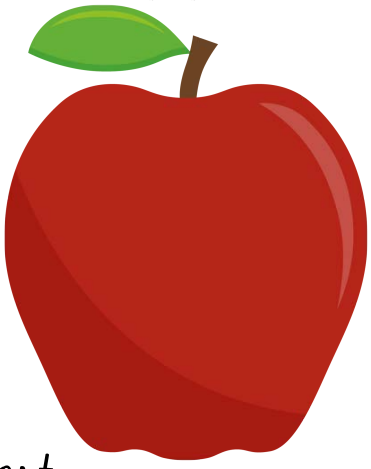


Sort
Plant Life Cycle

Sunflower

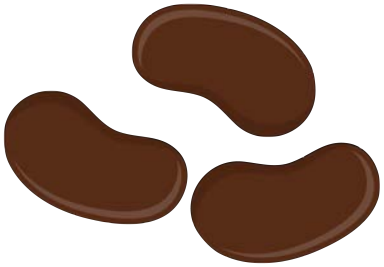
Sort
Plant Life Cycle

Apple



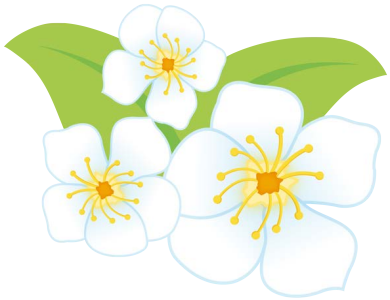
Sort
Plant Life Cycle

Bush Bean



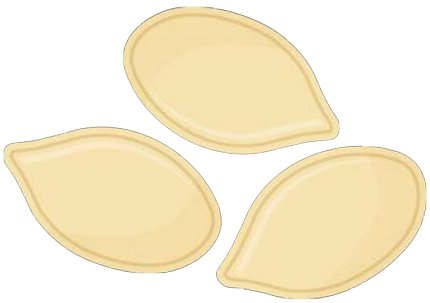
Sort
Plant Life Cycle

Apple



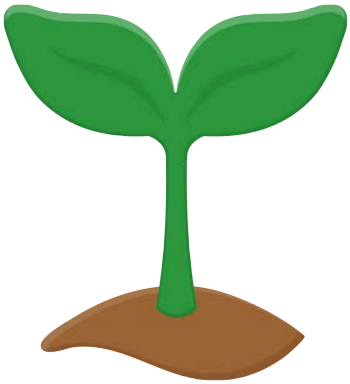
Sort
Plant Life Cycle

Pumpkin



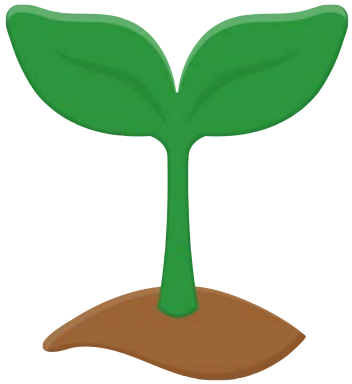
Sort
Plant Life Cycle

Watermelon



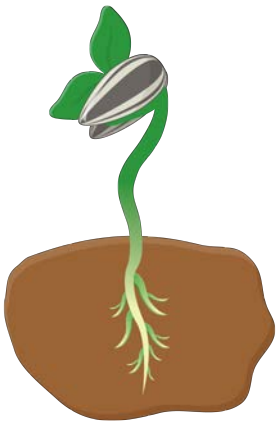
Sort
Plant Life Cycle

Pumpkin



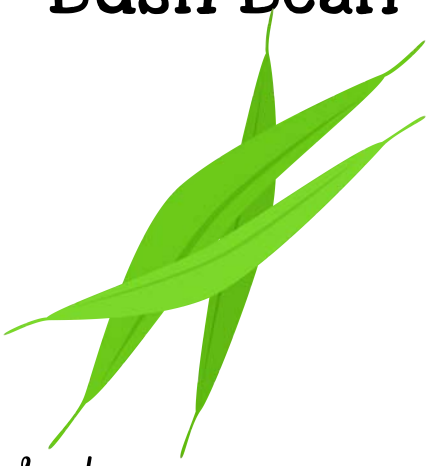
Sort
Plant Life Cycle

Sunflower



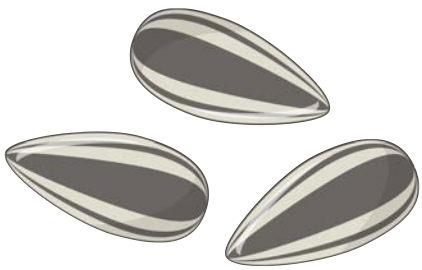
Sort
Plant Life Cycle

Bush Bean



Sort
Plant Life Cycle

Sunflower



Sort
Plant Life Cycle

Sort

Flower

Sort

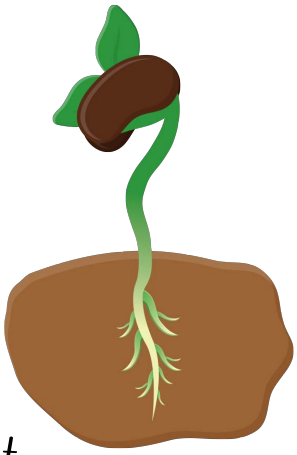
Seed

Sort

Seedling

Sort Fruit

Bush Bean



Sort
Plant Life Cycle

Bush Bean

Sort
Plant Life Cycle

Bush Bean

Sort
Plant Life Cycle

Sort
Plant Life Cycle

Sort
Plant Life Cycle

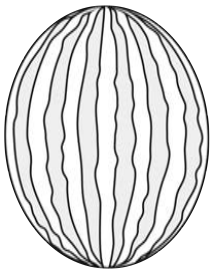
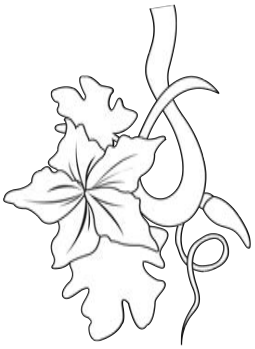
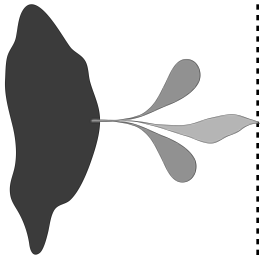
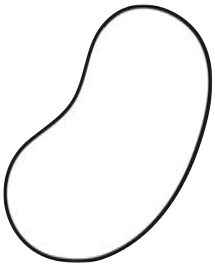
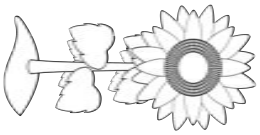
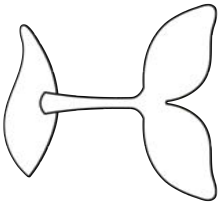
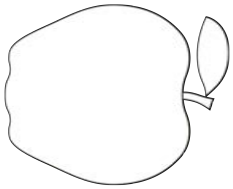
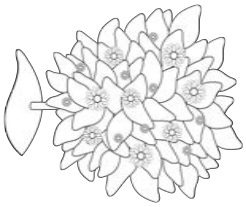
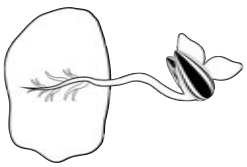
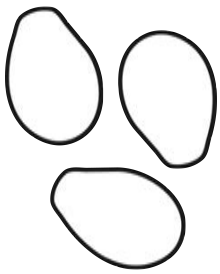
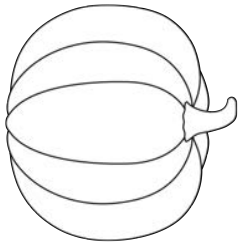
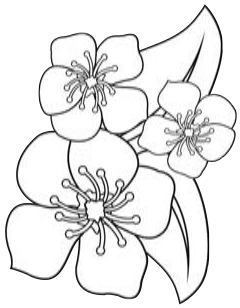
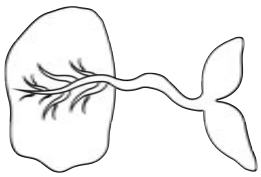
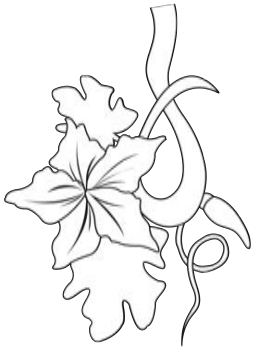
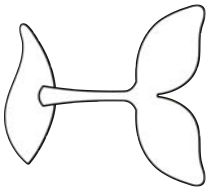
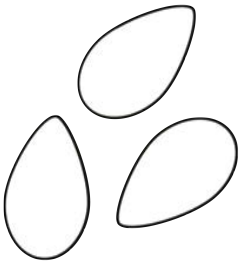
Sort
Plant Life Cycle

Sort Plant Life Cycle

Name: _____

Cut out the pictures of each stage of the life cycle. Identify the stage and glue down the picture in the correct row and column.

	Seed	Seedling	Flower	Fruit
Apple				
Pumpkin				
Watermelon				
Sunflower				
Bean				

Bean	Sunflower	Watermelon	Pumpkin	Apple
				
				
				
				

Sort Plant Life Cycle

Name: _____

1. When a seed is planted, what are the stages it goes through before it makes a new seed?

_____

_____

_____

2. What is the difference between the fruit and the seed?

_____

_____

_____

3. What is the difference between the seedling and the full-grown plant?

_____

_____

_____

4. Which plants have more than one part that you can eat?

_____

_____

_____

5. There are many plants that are our food.

a: List two plants that are not on your chart above from which you eat the fruit.

_____ _____

b: List two plants that are not on your chart above from which you eat the seeds.

_____ _____

c: List two plants that are not on your chart above from which you eat the roots.

_____ _____

Sort Plant Life Cycle

Name: _____

1. When a seed is planted, the stage it goes through next is _____.

2. The stage after the flower is _____

3. After the seedling, _____ starts to grow.

4. In the chart above the _____ is a plant from which you can eat more than one part.

5. There are many plants that are our food.

a: List two plants that are not on your chart above from which you eat the fruit.

_____ _____

b: List two plants that are not on your chart above from which you eat the seeds.

_____ _____

c: List two plants that are not on your chart above from which you eat the roots.

_____ _____

Sort Plant Life Cycle

Name: _____

1. When a seed is planted, the stage it goes through next is _____.

2. The stage after the flower is _____

3. After the seedling, _____ starts to grow.

4. In the chart above the _____ is a plant from which you can eat more than one part.

5. There are many plants that are our food.

a: List two plants that are not on your chart above from which you eat the fruit.

_____ _____

b: List two plants that are not on your chart above from which you eat the seeds.

_____ _____

c: List two plants that are not on your chart above from which you eat the roots.

_____ _____

Sort **Plant Life Cycle**

When a seed is planted, what are the stages it goes through before it makes a new seed?

#1

Sort **Plant Life Cycle**

What is the difference between the fruit and the seed?

#3

Sort **Plant Life Cycle**

What is the difference between the seedling and the full-grown plant?

#2

Sort **Plant Life Cycle**

Which plants have more than one part that you can eat?

#4

Sort **Plant Life Cycle**

List two plants that are not on your chart above from which you eat the fruit.

#5

Sort **Plant Life Cycle**

List two plants that are not on your chart above from which you eat the roots.

#7

Sort **Plant Life Cycle**

List two plants that are not on your chart above from which you eat the seeds.

#6

Sort **Plant Life Cycle**

#8

#1 Sort

What Part of the Plant Do We Eat?

When a seed is planted, the stage it goes through next is _____.

a. flower
b. mature plant
c. seedling
d. seed

#2 Sort

What Part of the Plant Do We Eat?

The stage after the flower is _____.

a. The seed is made in the fruit.
b. The mature plant grows.
c. The seedling is planted.
d. The fruit are harvested.

#3 Sort

What Part of the Plant Do We Eat?

After the roots and shoots grow on the seedling, _____ begins to mature.

a. a flower
b. a mature plant
c. a fruit
d. a seed

#4 Sort

What Part of the Plant Do We Eat?

Which plant has more than one part that you can eat?

a. sunflower
b. watermelon
c. apple
d. bean

#5 Sort

What Part of the Plant Do We Eat?

Which plant is a plant from which people eat the seeds?

a. pea
b. celery
c. carrot
d. lettuce

#3 Sort

What Part of the Plant Do We Eat?

#2 Sort

What Part of the Plant Do We Eat?

#4 Sort

What Part of the Plant Do We Eat?

Answer Key

Growth & Cycles Plants & Animals

Answers are included for worksheets and task cards that have concrete answers. Most answers in the answer key are short, incomplete sentences. Ask that students answer in complete sentences, where applicable.

Watch a Video

Name: _____

Watch the video about The Life of a Dung Beetle and answer the following questions:

1. What does the dung beetle do to get the dung?

Finds some dung on the ground, takes a piece of it and forms a dung ball to roll away.

2. How does the dung beetle carry away the dung?

Roll it away by walking on front legs and pushing the dung ball with hind legs.

3. How does the dung ball get put together?

The male and female work together at it.

4. When the dung ball is rolled to where the dung beetles want it, what do they do with it?

One beetle burrows into the earth to help bury the dung ball.

5. What happens after the dung ball is buried?

The female lays her eggs in the burrow.

6. When the eggs hatch, what do the dung beetle larvae (baby dung beetles) eat?

They eat the dung.

7. What do you think would happen if dung beetles could find no dung?

Answers vary, but possible answers include: There would be no food for the larvae (babies), so no new dung beetles could be hatched.

Watch a Video

Name: _____

The Life of a Dung Beetle

1. The dung beetle takes a piece of dung, forms a ball shape, and rolls it away.

2. The dung beetle carries away the dung by walking on its front legs and pushing the dung ball with its back legs.

3. The dung ball gets put together by the male and female beetles working together at it.

4. When the dung ball is rolled to where the dung beetles want it, they put it in a burrow or underground.

5. Once the dung ball is buried, the female lays her eggs in it.

6. When the eggs hatch, the dung beetle larvae (baby dung beetles) eat the dung.

7. If dung beetles could not find any dung, something that might happen would be Answers vary, but possible answers include: There would be no food for the larvae (babies), so no new dung beetles could be hatched.

Multiple Choice

1. c

2. a

3. d

4. a

5. a

6. c

Watch a Video

Name: _____

Watch the video about Stages of Plant Life Cycle and answer the following questions:

1. How does the life cycle of a plant begin?

seed

2. What does a seed need to begin to grow?

A seed needs light, water, and minerals to begin to grow.

3. After the roots and stems grow, what part grows next? What does this part produce?

flowers; seeds

4. What part of the plant grows out of the seed first? What does this part of the plant do?

roots; take up water and minerals from the ground to be used by the plant

5. What does the leaf do?

makes food for the plant

6. What does the flower become after it is pollinated? What does this part have?

fruit; seeds

7. How can we grow a plant?

put it in soil, water it regularly, make sure it has enough sunlight

Watch a Video

Name: _____

Stages of Plant Life Cycle

1. The life cycle of a plant begins with a seed.

2. When seeds get enough light, water, and minerals, they can begin to grow.

3. After the roots and stems grow, the next part of the plant to grow is flowers.

4. The flowers produce seeds.

5. The part of the plant that grows out of the seed first is the roots.

6. The roots take up water and minerals from the ground to be used by the plant.

7. The leaf makes food for the plant.

8. After it is pollinated, the flower becomes fruit. Inside the fruit are the seeds.

10. In order to grow a plant, first put it in soil. Next water it regularly. Also, make sure it has enough sunlight.

Watch a Video

Name: _____

Stages of Plant Life Cycle

Multiple Choice

1. c
2. d
3. a
4. d
5. b
6. a
7. c
8. d
9. a
10. d

Play a Video Game

Attack of the Hogweed

Name: _____

1. What does the sepal do?

protects the flower

2. What job do the petals have on a flower?

attracts insects

3. What happens in the stamen?

pollen is made

4. Play the second part of the game again. What are the four ways seeds were carried?

in a rabbit (rabbit droppings)

on the man's shoes

with the wind (in leaves)

in a bird / pigeon (bird droppings)

Play a Video Game

Attack of the Hogweed

Name: _____

Play a Video Game

Attack of the Hogweed

Name: _____

1. The sepal is the part of the flower that protects flowers.

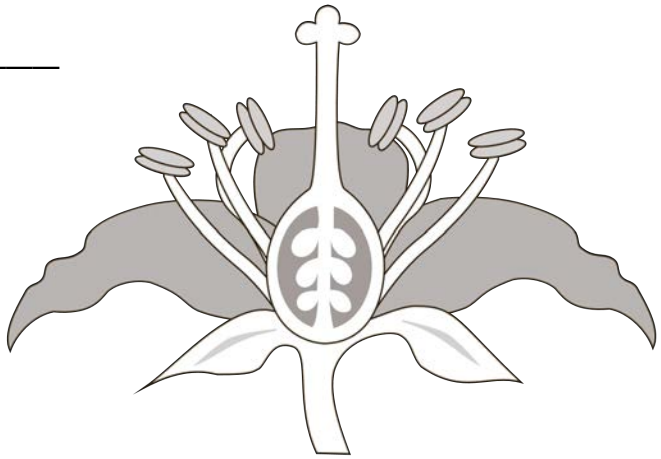
2. On the flower, the job of the petals is to attract insects.

3. The stamen is where pollen is made.

4. Play the second part of the game again. There were four ways seeds were carried. These include: Inside the two animals, rabbit and bird / pigeon.

On the man's shoes.

In the in wind / leaves.



Play a Video Game

Attack of the Hogweed

Name: _____

Multiple Choice

1. a

2. b

3. c

4. d

Play a Video Game

Parts of a Flower

Name: _____

1. What does the sepal do?

protects the flower

2. What job do the petals have on a flower?

attracts insects

3. What happens in the stamen?

pollen is made

4. What happens in the carpel?

seeds are made

5. True or False: There are male and female parts of a plant. true

Play a Video Game

Parts of a Flower

Name: _____

Play a Video Game

Parts of a Flower

Name: _____

1. The sepal is the part of the flower that protects flowers.

2. On the flower, the job of the petal is to attract insects.

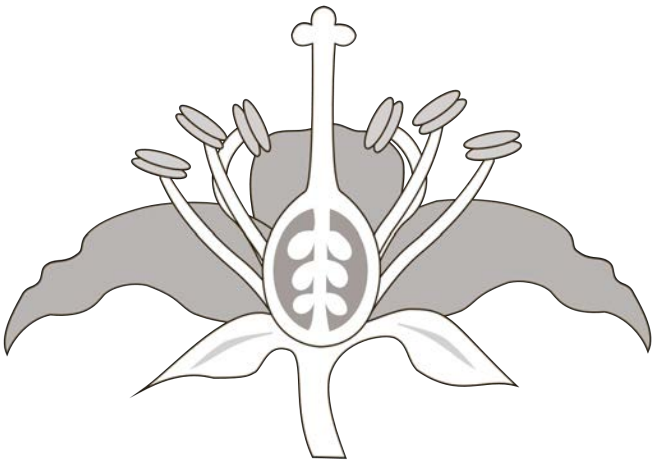
3. The stamen is where pollen is made.

4. The carpel is the part of the flower where seeds are made.

5. True or False:

There are male and female parts of a plant.

true



Play a Video Game

Parts of a Flower

Name: _____

Multiple Choice

1. a

2. b

3. c

4. d

5. True

Play a Video Game

Help a Plant Grow

Name: _____

1. What did it take to grow a healthy plant?

The right amount of water and heat. Not too much or too little water or heat.

2. What happens if you don't water your plant?

It stops growing without enough water.

3. What happens if you water your plant too much?

The roots get swamped with too much water. The plant stops growing.

4. What happens if you let the plant get too cold?

It stops growing without enough heat.

5. What happens if you let the plant get too hot?

It stops growing with too much heat.

6. Reset the experiment and press Grow. Pull the blinds down. What happens now?

The plants grow tall and spindly, as they search for light. Eventually they become weak and die.

Play a Video Game

Help a Plant Grow

Name: _____

1. In this game you try to grow a healthy plant. To do this, you need the right amount of

water _____ and heat _____.

2. If you don't water your plant, it stops growing or dies _____.

3. If you water your plant too much, it gets swamped, stops growing or dies _____.

4. If you let the plant get too cold, it stops growing _____.

5. If you let the plant get too hot, it stops growing or withers _____.

6. Reset the experiment and press Grow. Pull the blinds down. Now the plants grow

tall / spindly _____ as they search for light. Eventually they

become weak / die _____.

Play a Video Game

Help a Plant Grow

Name: _____

Multiple Choice

1. c

2. a

3. c

4. a

5. b

6. d

Play a Video Game

Animal Life Cycles

Name: _____

1. For the butterfly life cycle, where did the butterfly lay her eggs?

on a leaf

2. After the caterpillar had eaten and gotten big, what did it do?

Make a chrysalis (cocoon would be an acceptable answer, though chrysalis is technically correct)

3. For the bird life cycle, what stage came first?

the bird laid an egg

4. What does the newly hatched bird look like?

small, no feathers

5. Until it can fly, where does the young bird live?

in the nest

6. For the frog life cycle, what hatches out of the eggs?

tadpoles

7. How are newly hatched frogs different from adults?

no legs, long tail; they only live in water and cannot come out of the water

8. What is the stage called right before it becomes an adult frog?

froglet

Play a Video Game

Animal Life Cycles

Name: _____

1. For the butterfly life cycle, the butterfly laid her eggs on a _____leaf_____.

2. After the caterpillar had eaten and gotten big, it made a _____chrysalis or cocoon_____.

3. For the bird life cycle, the first stage was the _____egg_____.

4. Unlike its parent, the newly hatched bird has no _____feathers_____.

5. Until it can fly, the young bird lives in the _____nest_____.

6. For the frog life cycle, the _____tadpoles_____ hatch out of the eggs.

7. Unlike its parent, a newly hatched frog has no _____legs_____, but it does have a long _____tail_____. It can only live in the _____water_____.

Play a Video Game

Animal Life Cycles

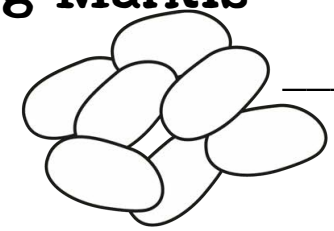
Name: _____

Multiple Choice

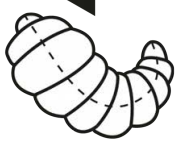
1. c
2. a
3. b
4. a
5. c
6. d
7. a
8. b

Investigate Ant vs. Praying Mantis

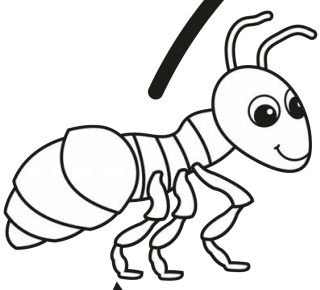
Name: _____



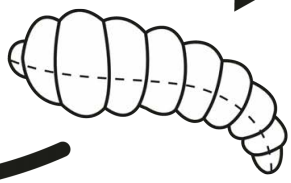
egg



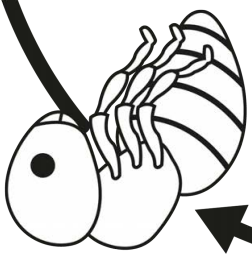
larva



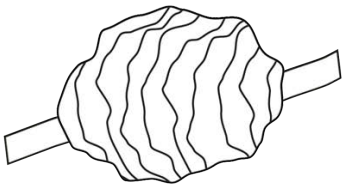
adult



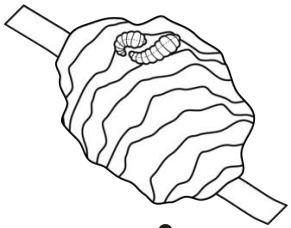
larva



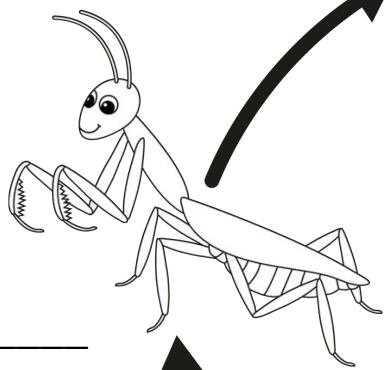
pupa



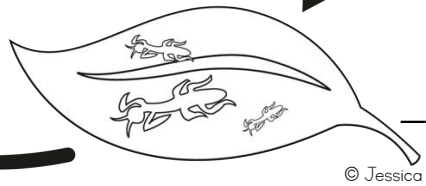
egg



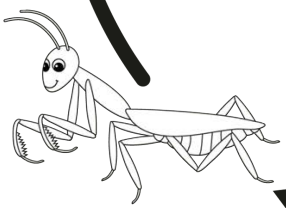
egg



adult



nymph

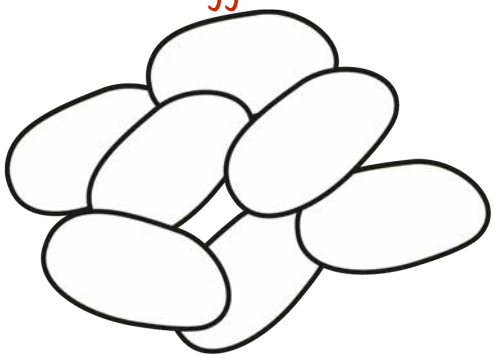


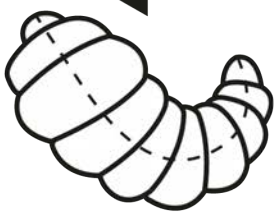
nymph

Investigate Ant vs. Praying Mantis

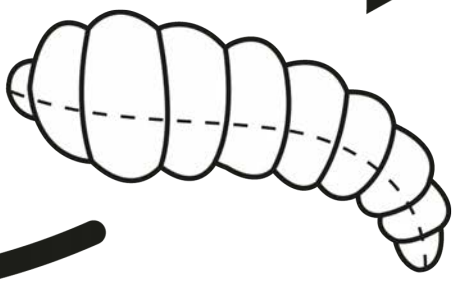
Name: _____

egg

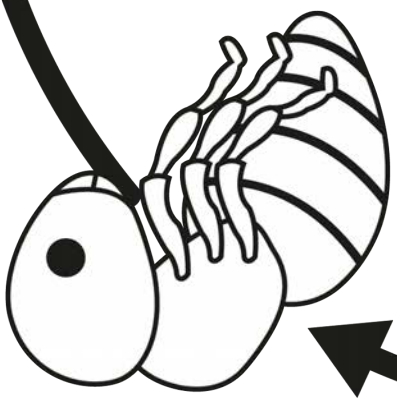




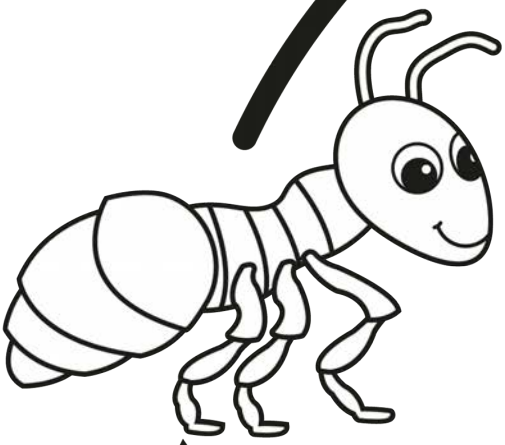
larva



larva



pupa

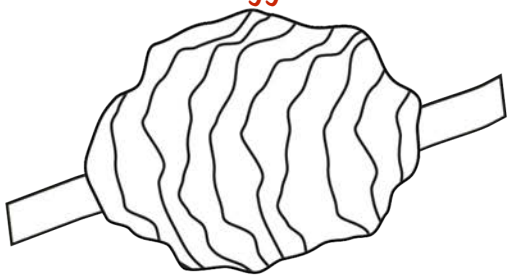


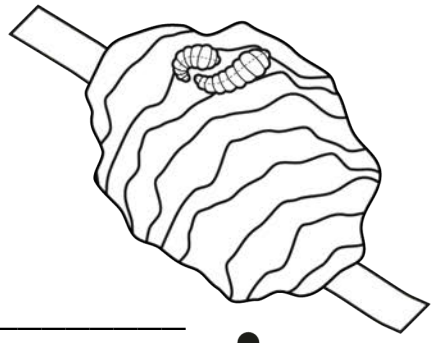
adult

Investigate Ant vs. Praying Mantis

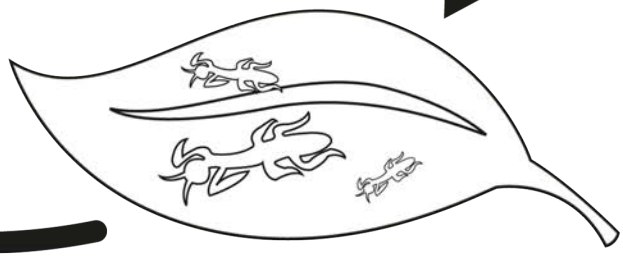
Name: _____

egg

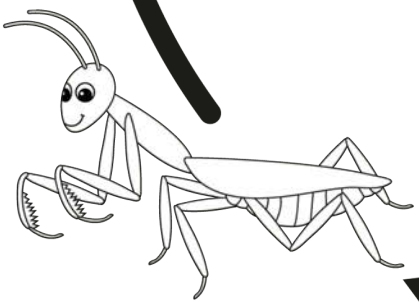




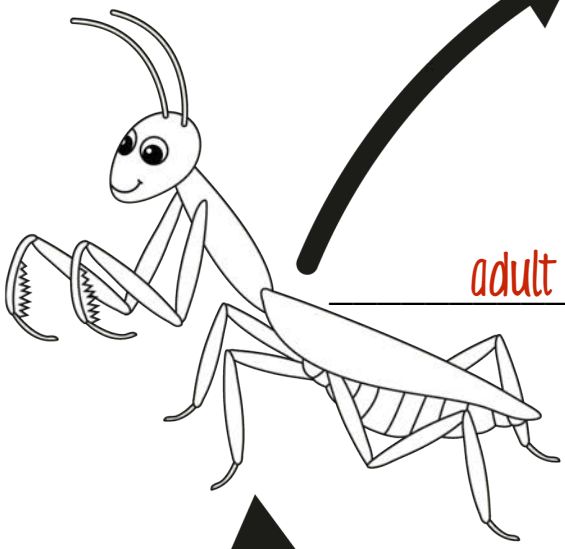
egg



nymph



adult



nymph

Investigate Ant vs. Praying Mantis

Name: _____

1. List the stages of complete metamorphosis.

egg, larva, pupa, adult

2. List the stages of incomplete metamorphosis.

egg, nymph, adult

3. How is a larva different from a nymph?

The larva looks like a worm or a grain of rice, and the nymph looks like a small adult.

4. You watch an insect egg hatch. Something that looks like a little worm comes out. Will the insect go through incomplete metamorphosis or complete metamorphosis?

complete metamorphosis

5. You watch an insect egg hatch. Something that looks like a small adult insect comes out. Will the insect go through incomplete metamorphosis or complete metamorphosis?

incomplete metamorphosis

6. Crickets go through incomplete metamorphosis. When they hatch from an egg, will they be a larva or a nymph?

nymph

7. Bees go through complete metamorphosis. When they hatch from an egg, will they be a larva or a nymph?

larva

Investigate Ant vs. Praying Mantis

Name: _____

1. The stages of complete metamorphosis are egg, larva, pupa, and adult.

2. The stages of incomplete metamorphosis are egg, nymph, and adult.

3. A larva is the stage when the insect looks like a worm.

4. A nymph is the stage when the insect looks like a small adult, but is missing wings.

5. You watch an insect egg hatch. Something that looks like a little worm comes out. This insect will go through complete metamorphosis.

6. You watch an insect egg hatch. Something that looks like a small adult insect comes out. The insect goes through incomplete metamorphosis

7. Crickets go through incomplete metamorphosis. When they hatch from an egg, they will be in the nymph stage.

8. Bees go through complete metamorphosis. When they hatch from an egg, they will be in the larva stage.

Investigate Ant vs. Praying Mantis

Name: _____

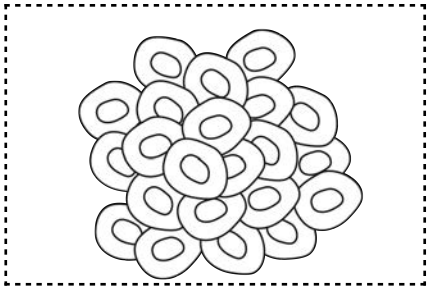
Multiple Choice

1. d
2. b
3. c
4. b
5. a
6. c
7. b
8. d

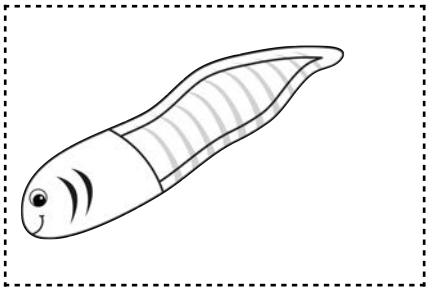
Diagram Animal Life Cycle

Name: _____

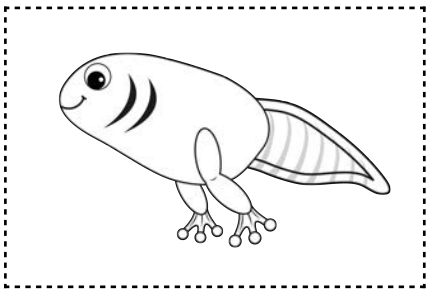
Frog Life Cycle



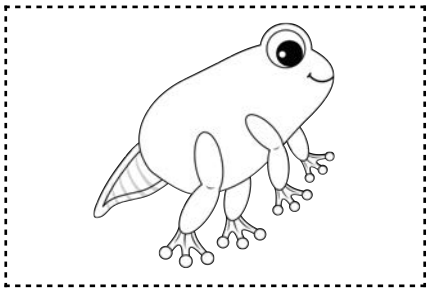
The female frog lays her eggs in water. The eggs feed the baby frogs.The eggs also protect the baby frogs.



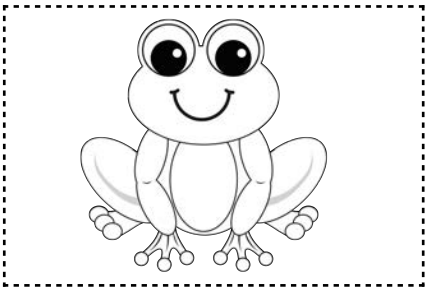
The eggs hatch. The tadpole swims out. It looks like a fish with fins and no legs. It lives only in water.



The tadpole is getting bigger. Tiny legs are beginning to grow. The tail grows smaller.



At this stage, it is a froglet. The tail is much smaller. The legs are growing bigger and stronger.



The frog is now an adult. It is ready to find a mate. Then it will make more eggs.

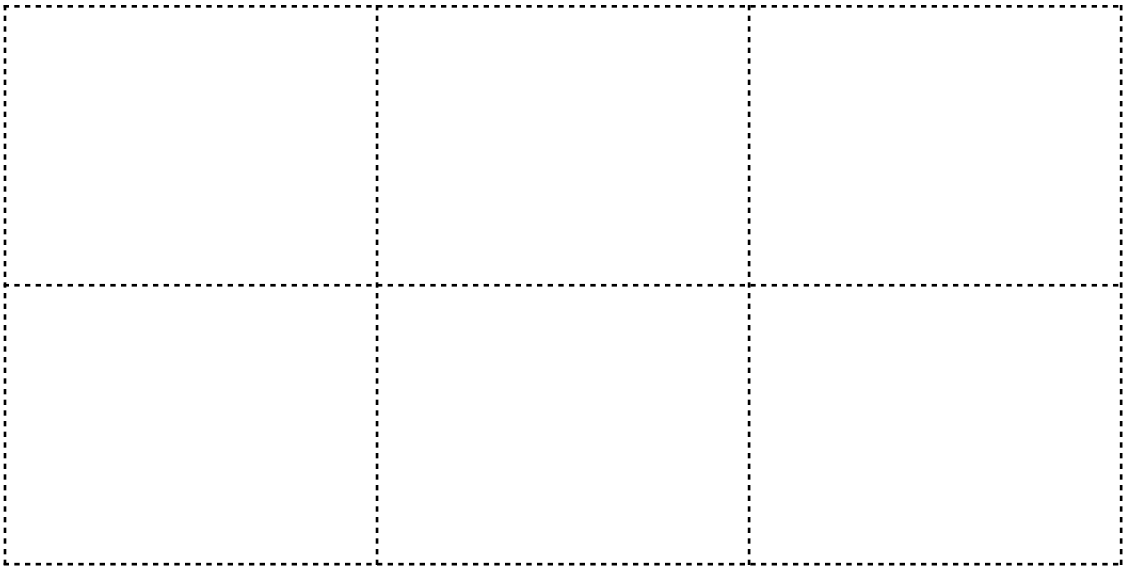
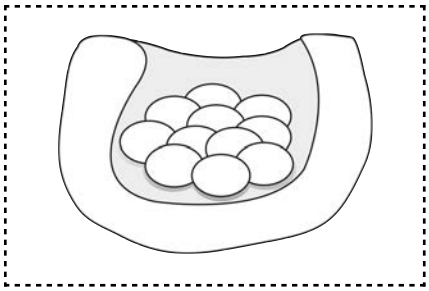


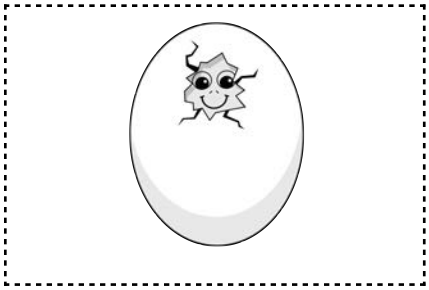
Diagram Animal Life Cycle

Name: _____

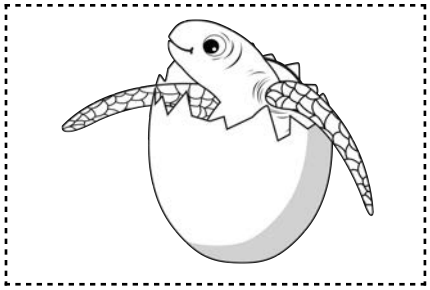
Sea Turtle Life Cycle



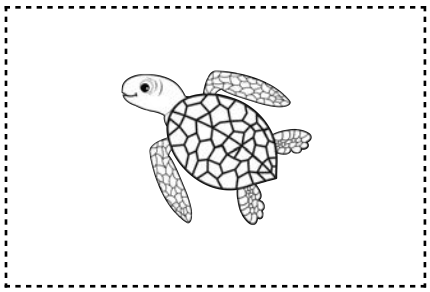
The female sea turtle lays her eggs. The eggs are in a nest. She dug the nest in the sand. The eggs have food for the babies. The eggs also protect the babies.



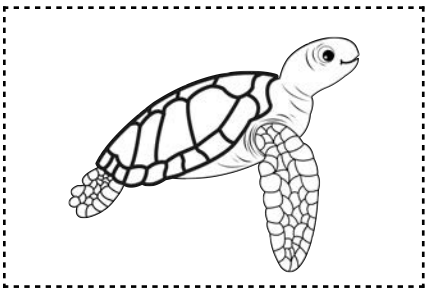
The eggs begin to hatch. The baby sea turtle has a special tooth to help get out of the egg.



The sea turtle comes out of the egg. The baby sea turtle digs up out of the sand nest. It crawls to the ocean and swims away.



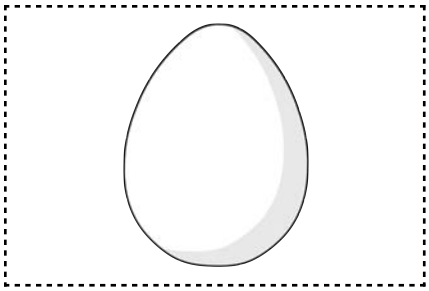
The sea turtle lives in the ocean. It swims, eats fish, and grows.



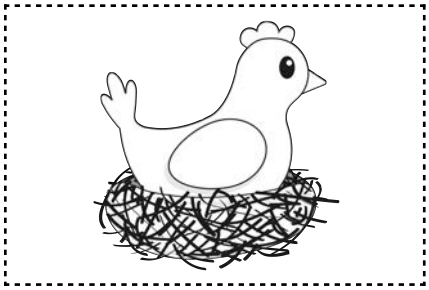
The turtle is now an adult. It is ready to find a mate. Then they will make more eggs.

Diagram Animal Life Cycle

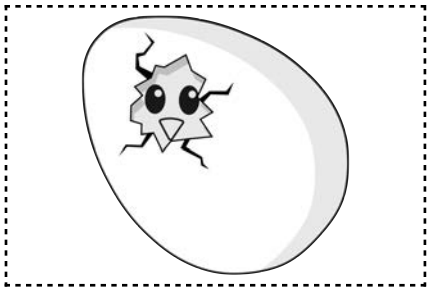
Name: _____



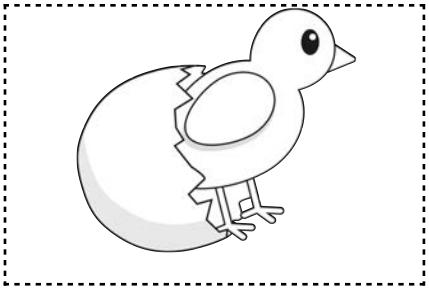
The hen lays her egg in a nest. The egg has food for the chick. The egg also protects the growing chick.



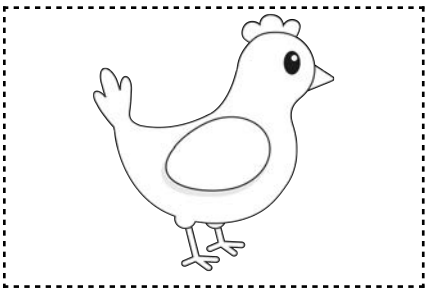
The hen sits on the egg to keep it warm. She protects it from danger. She turns the egg often. This moves the food in the egg so the chick can find it.



The chick pecks a hole in the egg. The hole gets bigger and bigger.



The chick then pushes through the shell. It comes out and dries off. After the chick rests, it eats grass, seeds, and bugs. It grows and grows. In a few months it will be fully grown.



The chicken is now an adult ready to find a mate. Then it will make more eggs.

Chicken Life Cycle

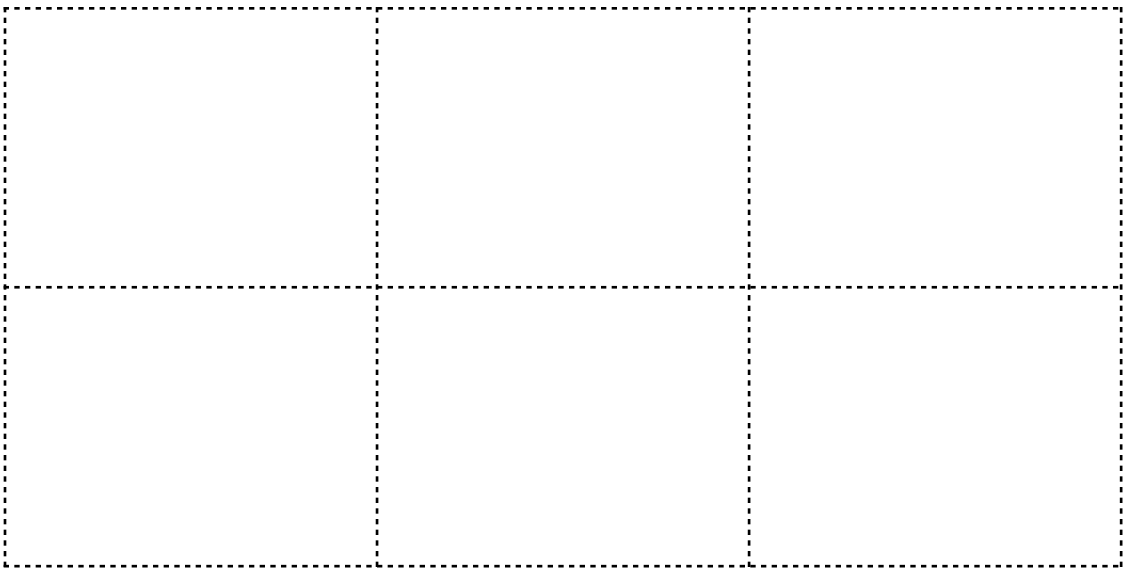
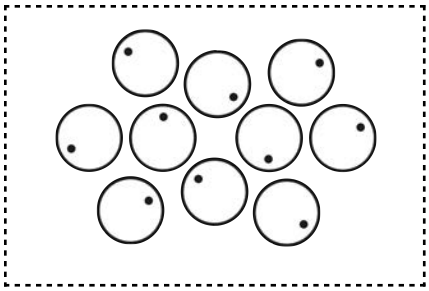
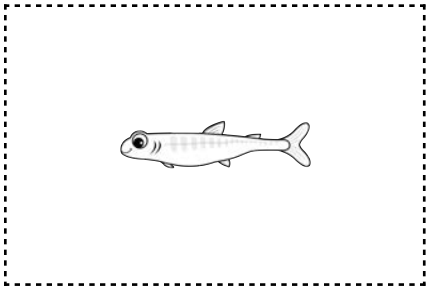


Diagram Animal Life Cycle

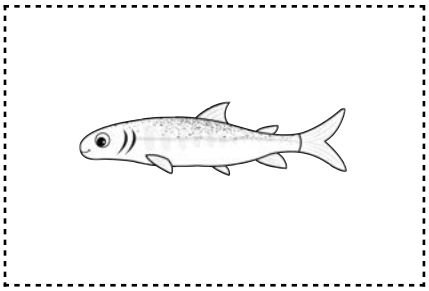
Name: _____



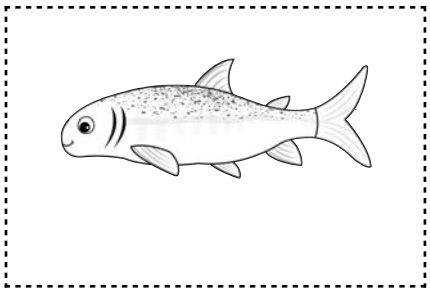
The female salmon lays her eggs in a river. The male fertilizes the eggs. They bury the eggs in the river bottom. The eggs have food for the babies. The eggs also protect the babies.



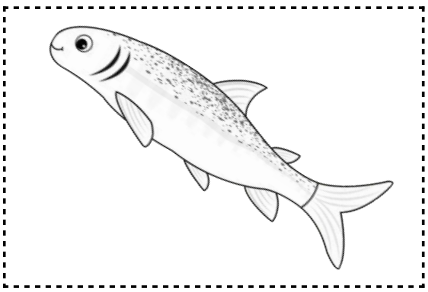
The eggs hatch. The baby salmon live in the sand for a few months. It eats and grows. Soon it is big enough to begin swimming in the river.



The young salmon swims to the sea. It eats and grows in the ocean. It lives in the ocean for more than a year.



The salmon is almost fully grown. It begins to swim back to the river where it was hatched. It is still eating and growing in the sea.



The salmon is now an adult. It found the river where it was hatched. The salmon finds a safe place for eggs.

Salmon Life Cycle

Diagram Animal Life Cycles

Name: _____

1. How do the life cycle of all these animals begin?

egg

2. What does the egg do?

Gives food to the baby growing in it and protects the baby.

3. While the baby is growing in the egg, which of the 4 mothers took most care of the egg? Why did she take care of her egg?

Chicken; To keep it warm; to keep it safe from danger; to rotate the egg, which moves food to the chick

4. When the egg is hatched, which of these four animals looks most like the adult?

sea turtle

5. When the egg is hatched, which of these four animals looks least like the adult?

frog

Diagram

Animal Life Cycles

Name: _____

1. The life cycle of all these animals begins at the _____egg_____ stage.

2. The job of an egg is to _____give food_____ and _____protect_____.

3. While the baby is growing in the egg, one mother took great care with the egg. This animal was the _____chicken_____. She took great care of her egg for these reasons:

To keep it warm; to keep it safe from danger; to rotate the egg, which moves food to the chick

4. When the egg is hatched, the animal that looked most like its parent is the _____sea turtle_____.

5. When the egg is hatched, the animal that looked least like its parent is the _____frog_____.

Diagram

Animal Life Cycles

Name: _____

Multiple Choice

1. b
2. a
3. c
4. d
5. b
6. a

Read Migrating Geese

Name: _____

1. Why do birds migrate?

They move to a warmer habitat in order to find food.

2. What shape does a flock of geese make when they fly in the sky?

They make a V shape, or a V formation.

3. When they get to their summer home, what does the goose do? What does the gander do?

The goose builds the nest. What does the gander do? The gander guards the nest.

4. What does the gosling look like?

It has soft, fluffy yellow feathers called down.

5. When the gosling hatches, can it walk? Can it swim? Can it fly? What can it do by autumn?

Yes, Yes, No, it can fly.

6. What will the geese do at their winter homes?

They will eat grass, seeds, and berries, and they will stay together in flocks.

Read Migrating Geese

Name: _____

1. Birds migrate to a warmer habitat in order to find food.

2. The shape a flock of geese makes when they fly in the sky is a V shape.

3. When they get to their summer home, the goose builds the nest and the gander guards the nest.

4. The gosling has feathers that look soft and fluffy and are called down.

5. When the gosling hatches, is can walk and swim. But it cannot fly.

6. By autumn, the gosling is able to fly.

7. At their winter homes the geese will eat grass, seeds and berries. They will stay together in flocks.

Read Migrating Geese

Name: _____

Multiple Choice

1. b
2. a
3. c
4. b
5. a
6. c
7. d
8. e

Model Flower Dissection

Name: _____

1. Petals attract insects to the plant for pollination. How do the petals on your flower help with this?

The colors of the petal make the insect want to come to it.

2. The bud is the flower before it opens. The sepal protects the bud. How does your sepal look different from the petal?

Depending on the type of flower you use, answers will vary. Generally, sepals are thicker and stronger than petals. They are often green, or the part of the sepal that was outside the bud and not tucked in is green.

3. Stamens make pollen. Insects land on the flower and take pollen off the stamen. Insects then move the pollen to another flower. How does the shape of the stamen help an insect to do this?

The long stamens will rub on an insect because they are tall and somewhat flexible.

4. Pollen lands on the pistil. Pollen makes seeds in the ovary. Why is it important that the pistil to attached to the ovary?

So that the pollen has a way to get to the ovary.

Model Flower Dissection

Name: _____

1. Petals attract insects to the plant for pollination. The color of the petal makes the insect want to come to it.

2. The bud is the flower before it opens. The sepal protects the bud. How does your sepal look different from the petal?

see below

3. Stamens make pollen. Insects land on the flower and take pollen off the stamen. Insects then move the pollen to another flower. The stamen helps an insect do this by rubbing or dropping pollen on it.

4. Pollen lands on the pistil. Pollen makes seeds in the ovary. It is important that the pistil to attached to the ovary so that the pollen has a way to get to the ovary.

Model Flower Dissection

Name: _____

#2 above depending on the type of flower you use, answers will vary. Generally, sepals are thicker and stronger than petals. They are often green, or the part of the sepal that was outside the bud and not tucked in is green.

Multiple Choice

1. a

2. see above

3. b

4. d

Explore

What Part of the Plant Do We Eat?

Name: _____

1. Look at the plants listed on your chart. Are there plants that you call vegetables that are actually fruit? If so, which ones?

answers will vary

2. What makes something a fruit?

It is the part that has seeds.

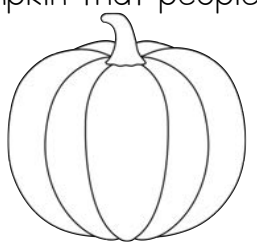
3. Name a fruit food that is not on your chart. Why is it a fruit?

Answers will vary.

4. Name a root food that is not on your chart. Why is it a root?

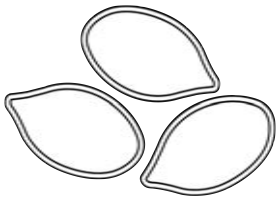
Answers will vary.

5. People can eat three different parts of the pumpkin plant. Look at the pictures of the parts of the pumpkin that people eat. Tell what part of the plant is pictured.



fruit

flower



seed

Explore

What Part of the Plant Do We Eat?

Name: _____

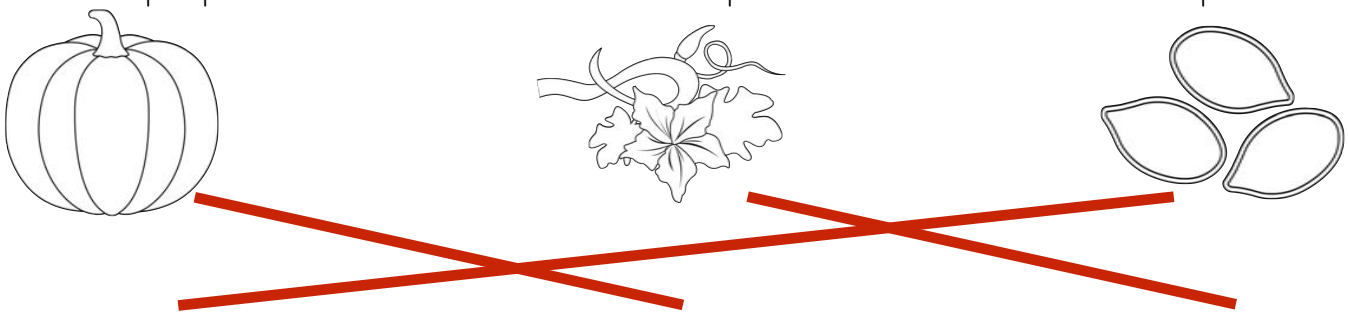
1. Look at the plants listed on your chart. The plants that you call vegetables but are actually fruit are Answers will vary.

2. The fruit is the part of the plant that has seeds.

3. A fruit food that is not on your chart is Answers will vary.

4. A root food that is not on your chart is Answers will vary.

5. People can eat three different parts of the pumpkin plant. Look at the pictures of the parts of the pumpkin that people eat. Draw lines to match the picture with the name of the part of the plant.



seed fruit flower

Explore

What Part of the Plant Do We Eat?

Name: _____

Multiple Choice

1. c

2. a

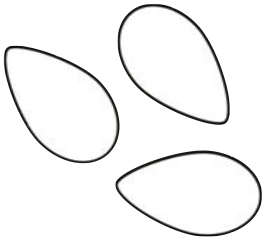
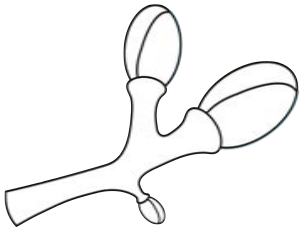
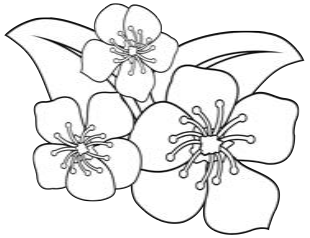
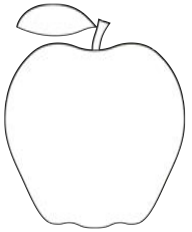
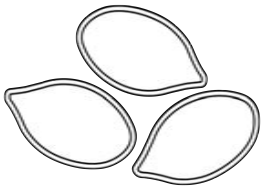
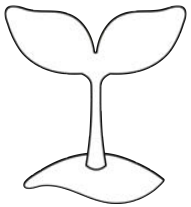
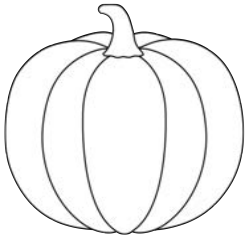
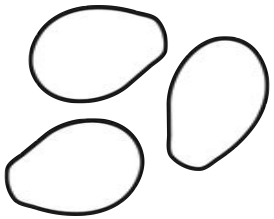
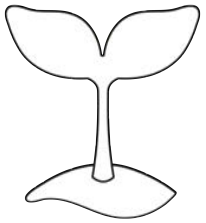
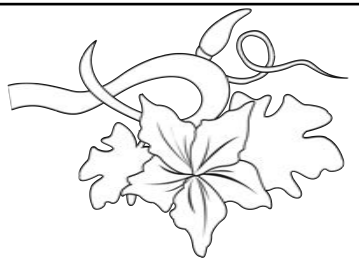
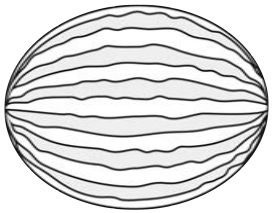
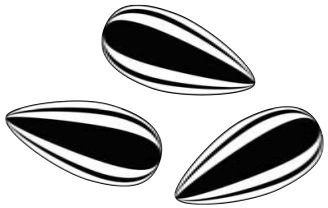
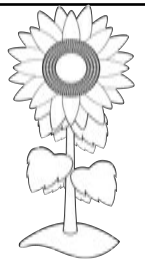
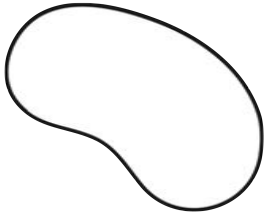
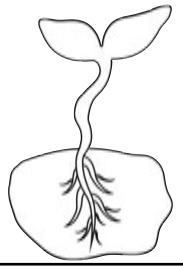
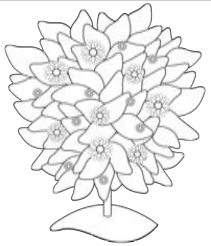
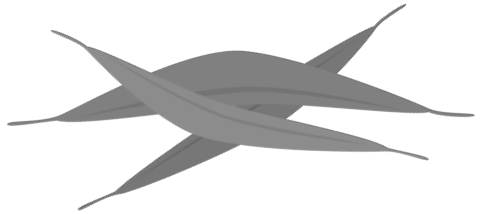
3. b

4. a

Sort Plant Life Cycle

Name: _____

Cut out the pictures of each stage of the life cycle. Identify the stage and glue down the picture in the correct row and column.

	Seed	Seedling or Bud	Flower	Fruit
Apple				
Pumpkin				
Watermelon				
Sunflower				
Bean				

Sort Plant Life Cycle

Name: _____

1. When a seed is planted, what are the stages it goes through before it makes a new seed?

A seed sprouts and grows roots and shoots, becoming a seedling. The seedling then grows more mature until it becomes a full-grown plant. A flower grows on the mature plant. The flower gets fertilized and begins to grow seeds. The fruit grows around the flower.

2. What is the difference between the fruit and the seed?

The seed is the part inside the fruit. The seed is the part of the plant that will become the new plant.

3. What is the difference between the seedling and the full-grown plant?

The seedling has only new roots and shoots sprouting from it. The full-grown plant has mature roots, leaves, and stems growing from it and is ready to start producing new seeds and fruits.

4. Which plants have more than one part that you can eat?

Pumpkin, bean, strawberry.

5. There are many plants that are our food.

a: List two plants that are not on your chart above from which you eat the fruit.

Answers vary, but might include tree fruits like avocado, cherry, citrus; any squash; peppers; tomatoes.

b: List two plants that are not on your chart above from which you eat the seeds.

Answers vary, but might include nuts, peas, tomatoes, peppers, cucumber.

c: List two plants that are not on your chart above from which you eat the roots.

Answers vary, but might include carrots, potatoes, radishes, beets, turnips, parsnips, rutabagas.

Sort Plant Life Cycle

Name: _____

1. When a seed is planted, the stage it goes through next is becoming a seedling.

2. The stage after the flower is the seed is made in the fruit

3. After the seedling, the full-grown plant starts to grow.

4. In the chart above the (choose one) pumpkin, bean, strawberry is a plant from which you can eat more than one part.

5. There are many plants that are our food.

a: List two plants that are not on your chart above from which you eat the fruit.

Answers vary, but might include tree fruits like avocado, cherry, citrus; any squash; peppers; tomatoes.

b: List two plants that are not on your chart above from which you eat the seeds.

Answers vary, but might include nuts, peas, tomatoes, peppers, cucumber.

c: List two plants that are not on your chart above from which you eat the roots.

Answers vary, but might include carrots, potatoes, radishes, beets, turnips, parsnips, rutabagas.

Sort Plant Life Cycle

Name: _____

Multiple Choice

1. c

2. a

3. b

4. d

5. a