Sea Otter Video Questions for eBook

Introduction
0:50   What happens when you remove a keystone?
1:04   What happens when a keystone species is removed?

Otter Biology
2:34   What other animals besides sea otters are in the weasel family in Kodiak?
3:38   What are some traits of a mammal?
3:53   What are some examples of mammals besides sea otters?
4:08   What is a marine mammal?
4:18   What are some examples of marine mammals?
5:06   Where do you lose body heat faster, water or air?
5:18   What do some marine mammals, like whales, use to keep warm?
5:34   What do sea otters use to keep warm?
6:17   What else do sea otters do to keep warm?
6:24   How much food does an otter eat in a day as a percent of body weight?
6:58   What are some animals that sea otters eat?

Activity 1: How Much Does a Sea Otter Eat?
9:04   What units do scientists use to measure weight?
9:44   How many pounds are in a kilogram?
9:54   What units would you use to measure something that weighs less than a kilogram?
10:09   How many grams are in a kilogram?
11:05   We know that a sea otter eats about 1/3 of its body weight in food a day. To determine how much food a 30kg otter needs to eat each day, we find 1/3 of its weight. How much is 30kg/3?
12:20   What number do you multiply the answer by to convert it from kilograms to grams?
12:37   How much food does the 30kg otter need to eat each day?
12:56   Oswald weighs 36kg. To find out how much he needs to each day, we find 1/3 of his weight. How many kg of food does Oswald need to eat?
13:28   To convert kilograms to grams we multiply by 1000. How many grams of food does Oswald eat each day?
14:25   To convert your weight in pounds to your weight in kg, what number do you multiply by?
14:38   What is 1/3 of Theo's weight or your weight in kg?
15:08   What is Theo's or your weight in grams?

How Much Does a Sea Urchin Weigh?
16:35   What is a favorite food of sea urchins?
17:16   How would you figure out how many urchins Oswald needs to eat each day?
17:47   How many urchins does Oswald need to eat each day?
18:19   How many urchins would Theo or you need to eat each day if he or you were otters?

Activity 2: What else does a sea otter eat?
19:37   List at least nine animals that sea otters eat. Write a fact down for each of them.
30:00   What kind of habitats do urchins, sea stars, herring, crabs and clams live in?
33:08   Why do sea otters like to hang out around kelp forests?
34:01   What are some things a kelp forest provides?
34:26   If the otters left the kelp forest, how would that effect the urchins and the kelp?
34:59   If the kelp forest goes away, what happens to the other animals that live there?
35:15   What do the otters do to keep the kelp forest healthy?

Summary
36:45   What were sea otter pelts used for in Russia and China in the 1700s?
37:05   Why did the Russian traders want to hunt sea otters?
37:26   In the 1700s, were there a lot of sea otters along the coasts of Alaska, Washington, Oregon and California, or not many?
37:50   What do a lot of sea otters mean for the urchin population? Why?
38:17   If there are few urchins, what does that mean for the kelp forest? Why?
38:31   If there is lots of kelp, are the lots of other animals around, or not many? Why?
39:55   By the early 1900s, the hunters had killed almost all the sea otters. How would that effect the sea urchin population? Why?
40:15   If there are lots of urchins, what happens to the kelp?
40:26   If there isn't much kelp, will there be lots of other animals around, or not very many?
41:22   The US government passed a law prohibiting the hunting of otters to keep them from going extinct. What is the one exception to that law?
42:10   In some places, sea otters have returned. Not as many as there used to be, but quite a few. In those places, what would the urchin population be like?
42:39   What about the amount of kelp?
42:51   What about the other animals that live in the kelp forest?
42:57   When there are some otters in the kelp forest, is the ecosystem balanced or unbalanced?
43:26   How are sea otters similar to a keystone in an arch?