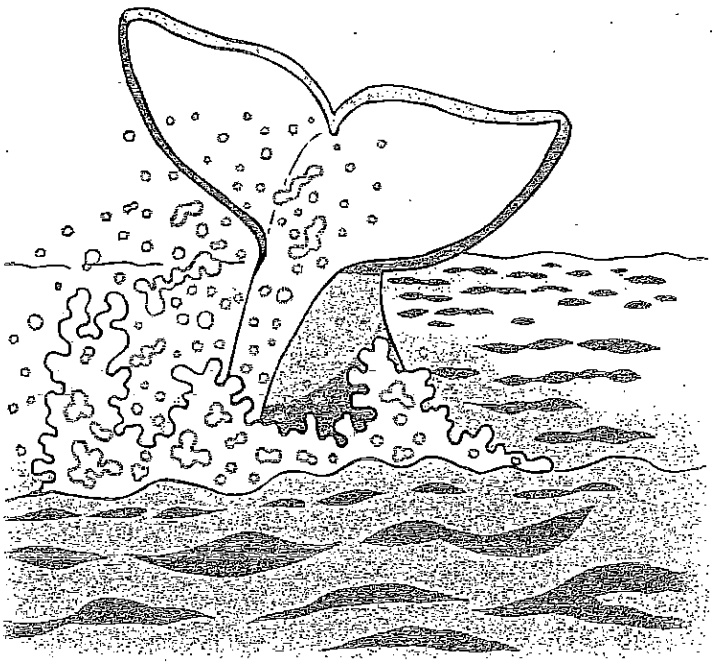
Name _____ Migration

A Long Journey

Gray whales travel over 10,000 miles a year!

In the summer, gray whales bask in the northern Pacific Ocean. These giant sea mammals eat tiny sea creatures, such as krill, that thrive there during the summer. A whale feasts on over a ton of krill a day! This helps the whale build up a thick layer of fat, or blubber. The whales need blubber to live on during their long journey southward. They travel more than 5,000 miles to the warm waters of western Mexico. Here, the mother whales give birth to their calves. Baby whales then drink milk from their moms. This builds a layer of blubber on the calves. In the spring, the babies swim back with the group to the same cold northern waters. There the gray whales again feast on the shrimplike krill. This migration happens year after year.



Use the passage to answer the questions.

1. How much krill can one gray whale eat each day? _____

   _____

2. About how many miles do whales travel from the northern Pacific Ocean to the waters near western Mexico? _____

3. Why do gray whales need blubber? _____

   _____

4. Why do you think gray whale calves are not born in the northern Pacific Ocean? _____

   _____

Name _____ Migration

A Long Journey

Match each cause to its effect.

Causes

_____ 1. During migration, gray whales live mostly on the fat that was stored during the summer.

_____ 2. During the winter, whale calves grow a thick layer of blubber.

_____ 3. Whale hunting has declined since the 1930s.

_____ 4. A gray whale eats more than 2,000 pounds of krill a day in the summer.

_____ 5. Gray whales swim near the shore when they migrate.

Effects

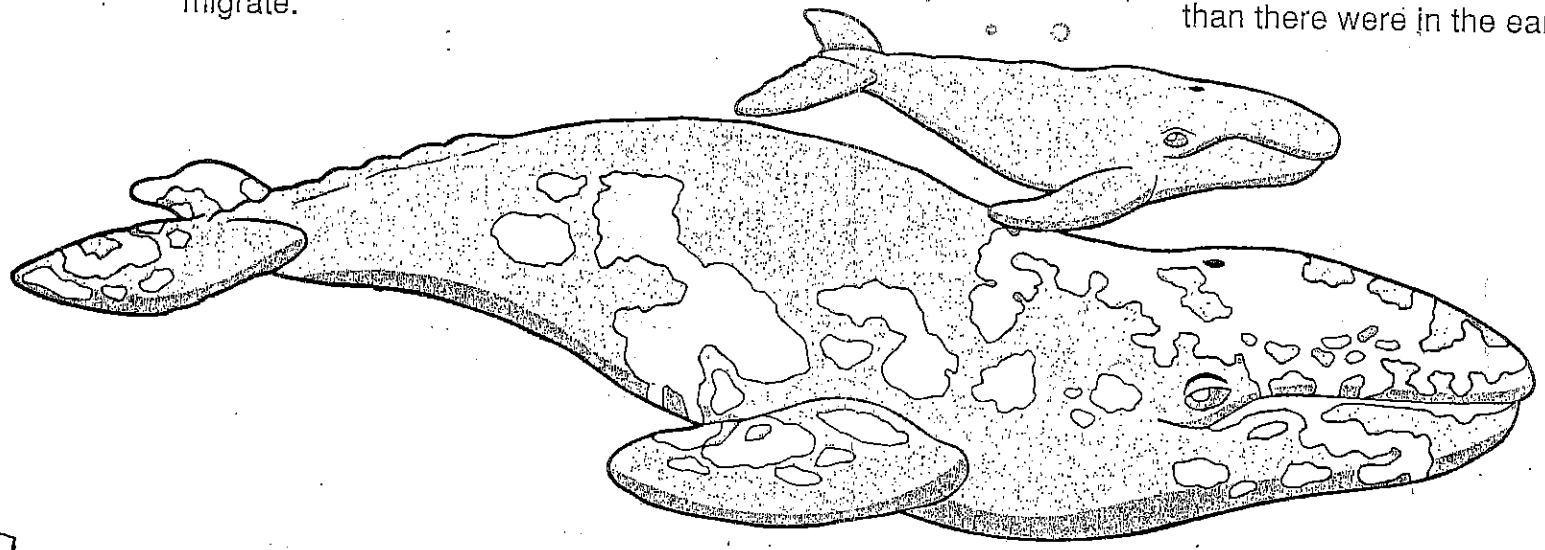
A. Whale watching is a popular activity.

B. Gray whales build a thick layer of blubber.

C. The whales eat little, if any, food while they travel.

D. In the spring, the calves are ready for the long trip north.

E. There are more gray whales today than there were in the early 1900s.

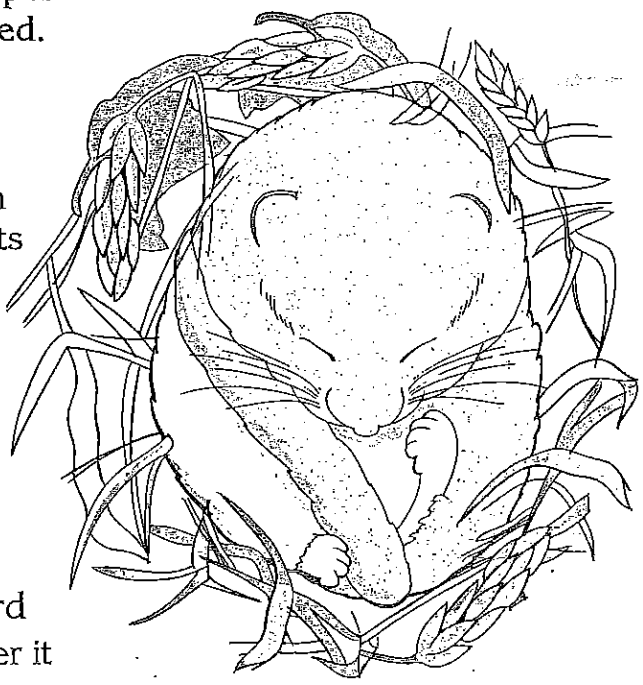


Bonus

What is an advantage of the whales migrating in a group?

A True Sleepyhead

A hibernating dormouse is such a sound sleeper that it can be handled without being awakened.



The dormouse is serious about hibernation and plans it carefully! First, this nocturnal mouse makes a cozy nest. Its winter nest is on the ground or underground. The dormouse eats so many berries, tree flowers, and nuts that it becomes plump. It may even weigh twice as much as normal. As winter arrives, the rodent curls into a ball. Its breathing slows down. Its heart beats more slowly. Its body temperature drops. As the animal sleeps, it survives on the body fat that it saved during the fall. If the dormouse wakes too soon, it can use up the stored fat too quickly and starve. But it is hard to wake a hibernating dormouse. No wonder it is sometimes called the dozing mouse!

Word Bank

soon
slower
drops
night
fat
more

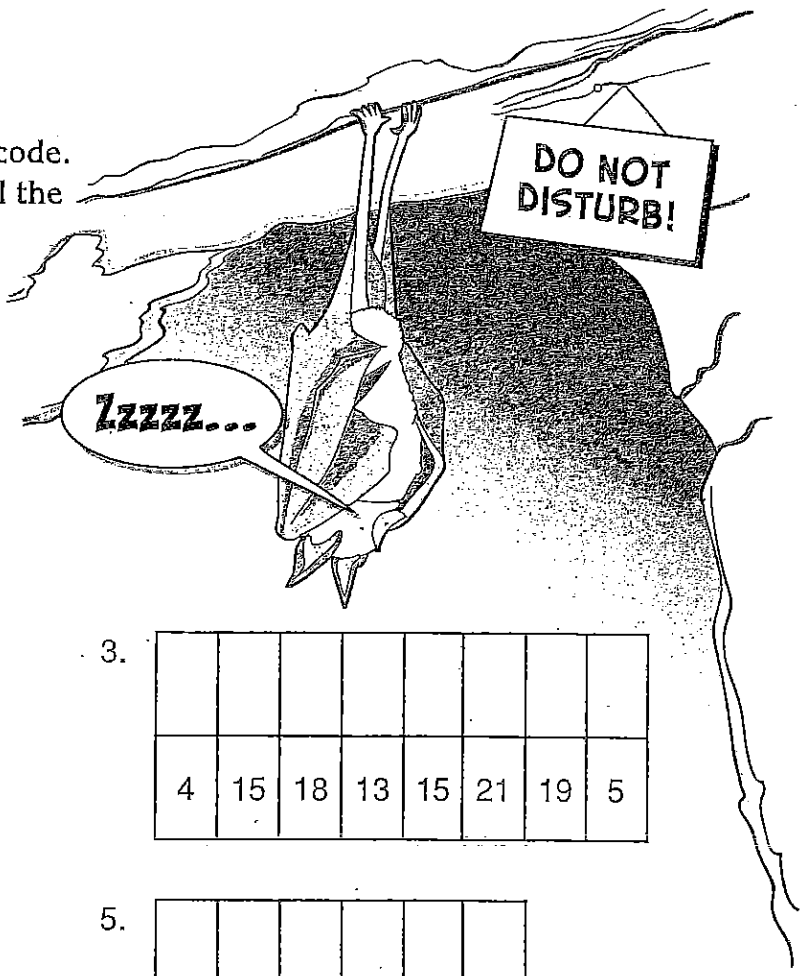
Cross out the word that makes each sentence false. Choose a word from the word bank to make the sentence true. Write the new word on the line.

1. The nocturnal dormouse searches for food during the day.
   _____
2. The dormouse eats less food before hibernating.
   _____
3. During hibernation, the dormouse's breathing gets faster.
   _____
4. The dormouse's body temperature rises during hibernation.
   _____
5. The hibernating dormouse survives on stored water.
   _____
6. The dormouse could starve if it wakes too late.
   _____

Name _____ Hibernation

A True Sleepyhead

Match the numbers to the letters in the code. If your answers are correct, you will spell the names of six animals that hibernate.



1.

23	15	15	4	3	8	21	3	11

2.

20	15	1	4

3.

4	15	18	13	15	21	19	5

4.

14	9	7	8	20	8	1	23	11

5.

12	9	26	1	18	4

6.

7	18	5	1	20	5	18		8	15	18	19	5	19	8	15	5		2	1	20

CODE

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26

Bonus

What do you think would happen if winters became warmer where hibernating animals live? What do you think would happen if summers became cooler where hibernating animals live? Explain.

Name : _____ Score : _____ C

Metric Unit Conversion - Mass

Kilogram/Gram: T1S1

Example 1 : 46500 g = _____ kg	Example 2 : 46.5 kg = _____ g
1000 grams = 1 kilogram $46500\ g = \frac{46500}{1000}$ **= 46.5 kg**	**1 kilogram = 1000 grams** 46.5 kg = 46.5 × 1000 **= 46500 g**

Convert the following grams (g) to kilograms (kg).

1) 70263 g = _____ kg	2) 24280 g = _____ kg
3) 54300 g = _____ kg	4) 8000 g = _____ kg
5) 62132 g = _____ kg	6) 43510 g = _____ kg
7) 10340 g = _____ kg	8) 24100 g = _____ kg

Convert the following kilograms (kg) to grams (g).

9) 35.2 kg = _____ g	10) 70.43 kg = _____ g
11) 41.236 kg = _____ g	12) 13 kg = _____ g
13) 65.5 kg = _____ g	14) 27.89 kg = _____ g
15) 50.01 kg = _____ g	16) 82.8 kg = _____ g

Name : _____ Score : _____ D

Length - Metric Unit Conversion

T1S1

Convert between centimeters (cm) and millimeters (mm).

1) 12.7 cm = _____ mm	2) 54.54 mm = _____ cm
3) 710 mm = _____ cm	4) 94.2 cm = _____ mm
5) 47.68 cm = _____ mm	6) 653.6 mm = _____ cm

Convert between meters (m) and centimeters (cm).

7) 5900 cm = _____ m	8) 1450 cm = _____ m
9) 64.71 m = _____ cm	10) 36.32 m = _____ cm
11) 7630 cm = _____ m	12) 25.4 m = _____ cm

Convert between kilometers (km) and meters (m).

13) 21 km = _____ m	14) 19781 m = _____ km
15) 69580 m = _____ km	16) 78.32 km = _____ m
17) 9.5 km = _____ m	18) 41300 m = _____ km

Science Standard: Understands how species depend on one another and on the environment for survival

Benchmark: Knows that changes in the environment can have different effects on different organisms

Changing with the Environment

Every plant and animal is designed to live in a specific environment, or biome. A cactus would die in a swamp, just as a cattail would die in a desert. These plants are meant to live in different biomes. The cattails grow in the swamp because they need standing water. The cactus likes the high heat and little rainfall of a desert. It stores water inside itself.

Sometimes the environment changes. Then the plants and animals that are suited only to a specific place are suddenly in trouble. They must change in order to survive. Many people believe that a change in environment explains what happened to the dinosaurs. The theory states that a meteor struck Earth millions of years ago and caused a climate change. The world immediately got a lot colder. The cold-blooded dinosaurs needed more heat. They ate the kinds of plants that grew in warm places. The change was too sudden. The dinosaurs couldn't adapt. They all died out.

For the dinosaurs all we have is a theory. Now we have seen other plants and animals die out when the environment changes. Some species can adapt, or change, quickly in response to changes humans make to their environment. One example happened in Britain with the peppered moth. During the early 1800s most peppered moths were white with black spots. Only a few odd ones were black. The white moths blended in with tree trunks. The black ones could easily be seen. Since the birds usually ate them, they did not get to reproduce. The population of white peppered moths stayed large; the population of black peppered moths stayed very small. Then in the mid 1800s people built a lot of factories. The factories' smokestacks sent lots of ashes into the air. These ashes darkened the bark on the trees where the moths lived. Now the white moths no longer blended in with the tree trunks. As a result, the birds saw and ate them. They did not get to reproduce. The number of white peppered moths **dwindled**. More and more black peppered moths survived. Today, most peppered moths in Britain are black.

Unfortunately, most plants and animals cannot adapt so quickly. Many species have become extinct. More die off each day. This is especially true in rainforests, where creatures rarely adapt to a change in their environments.

Changing with the Environment

Comprehension Questions

1. **The dinosaurs may have died because of**
   - (a) a lack of medicine.
   - (b) a climate change.
   - (c) a biome.
   - (d) a theory.

2. **On a historical time line, what happened second?**
   - (a) Most peppered moths were black.
   - (b) Most peppered moths were white.
   - (c) Factories were built in Britain.
   - (d) The peppered moth population started to change.

3. **Which is an example of people making a big change to a biome?**
   - (a) growing a crop
   - (b) filling in a swamp.
   - (c) opening a beach
   - (d) repairing a road

4. **A synonym for *dwindled* is**
   - (a) darkened.
   - (b) lightened.
   - (c) increased.
   - (d) decreased.

5. **Which is a biome?**
   - (a) the temperature
   - (b) the sky
   - (c) the ocean
   - (d) the sun

6. **Picture a bird searching for peppered moths. Where is it looking?**
   - (a) on tree trunks
   - (b) in the grass
   - (c) under the dirt
   - (d) high in the sky

7. **What environmental change do you think would be the easiest for an animal to adapt to: temperature, length of seasons, amount of water available, or kinds of food available? Explain.**

_____

_____

_____

Super-Journal Week 4:1

Every night, you should be reading at least 30 minutes of whatever book you have checked out from your assigned reading list. Tape or glue (but do not staple) this sheet into your Super-Journal on the left-side page. Fill in the table below *every day* by recording the required data.

Day	Title	Start Pg.	End Pg.	**Parent Sign.**
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				

On the right-side page of your Super-Journal, answer one of the questions below throughout the week. Be sure that the questions you choose to answer go with the appropriate type of book (Fiction or Nonfiction).

FICTION

1. You will be making **2 whole page colorful illustrations** based off of 2 separate quotes from your reading. Each illustration should take an entire page and should be **colored.** Make sure that you write the quote, and the **page number** you got your quote from at the bottom of each colorful illustration.

NONFICTION

1. What is this text about?
2. Summarize the main ideas in 5 sentences.

RL.3.7/RI.1.2

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RL.3.7/RI.1.2

Geography Standard: Understands the charactertistics of ecosystems on Earth's surface

Benchmark: Knows the components of ecosystems and how human intervention can change them

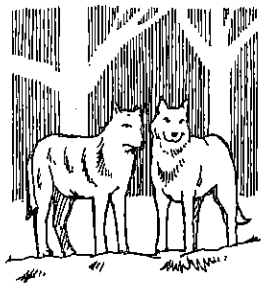
Staying in Balance

An ecosystem is a community of plants and animals. They interact with each other and their environment. Since ecosystems are based on food chains, an ecosystem must stay in balance. This means that the number of plants and animals stay pretty much the same. Why? Well, if there are too many plant consumers, they will ruin the plant population by eating the plants faster than the plants can grow back. If there are too many animal consumers, they will run out of food.

Suppose a disease killed a lot of birds. The dead birds fall to the ground and rot. Bacteria feed on the dead birds until the number of bacteria is too large. Too many bacteria in the soil cause plants to die. Then mice (plant consumers) can't find enough food. They leave the area or starve. Now the snakes (animal consumers) that ate the mice are left without food. They too must leave the area or starve. The ecosystem's **imbalance** ruined the community.

Unfortunately, people often do things that disrupt the balance of ecosystems. People build houses and roads on land that animals need for homes. They fill in wetlands. They pollute the air, land, and water. Some animals have been hunted almost to extinction.

If humans do not interfere, ecosystems will eventually rebalance on their own. This takes many years. What happened on Isle Royale in Lake Superior is a good example. In the 1920s a pair of moose swam out to Isle Royale. They were the only large animals there, so by 1930 their population had grown to 3,000! That many moose ate the plants faster than the plants could grow back. In 1933 the moose began to starve. As they died, their numbers dropped. With fewer moose, the plants grew back. Over time the moose population grew again.



In 1950 a pair of wolves swam out to the island. They ate the moose, and the number of wolves increased. When there got to be too many wolves, they started to starve. After many years a stable balance of 600 moose and 20 wolves lived on Isle Royale. There were just enough moose and just enough wolves to keep them both from starving.

Staying in Balance

Comprehension Questions

1. **In what year did the moose start to die?**
   - (a) 1920
   - (b) 1930
   - (c) 1933
   - (d) 1950

2. **On a historical time line, what happened third?**
   - (a) Moose came to Isle Royale.
   - (b) Wolves came to Isle Royale.
   - (c) The moose didn't find enough to eat.
   - (d) The wolves didn't have enough to eat.

3. **Which human activity would have the biggest effect on an ecosystem?**
   - (a) paddling a canoe
   - (b) building a campfire
   - (c) flying a plane
   - (d) building a road in a jungle

4. ***Imbalance* means**
   - (a) perfection.
   - (b) size.
   - (c) disharmony.
   - (d) dirtiness.

5. **What could happen if Isle Royale had 400 moose and 25 wolves?**
   - (a) The number of wolves would increase.
   - (b) The moose would eat too many plants.
   - (c) The number of moose would increase.
   - (d) The wolves would begin to starve.

6. **Picture a place with so many deer that they are starving. To rebalance the ecosystem, people may**
   - (a) try to scare the deer away.
   - (b) allow deer hunting.
   - (c) put out food for the starving deer.
   - (d) pass laws to protect deers from hunters.

7. **Would making a new landfill affect the ecosystem of that area? Explain.**

_____

_____

_____

Name : _____ Score : _____ A

Metric Unit Conversion - Length

Meter/Centimeter: T1S1

Example 1 : 298 cm = _____ m	Example 2 : 2.98 m = _____ cm
100 cm = 1 m 298 cm = $\frac{298}{100}$ **= 2.98 m**	**1 m = 100 cm** 2.98 m = 2.98 × 100 **= 298 cm**

Convert the following centimeters (cm) to meters (m).

1) 9200 cm = _____ m	2) 4620 cm = _____ m
3) 6426 cm = _____ m	4) 2130 cm = _____ m
5) 7718 cm = _____ m	6) 976 cm = _____ m
7) 3580 cm = _____ m	8) 5800 cm = _____ m

Convert the following meters (m) to centimeters (cm).

9) 83.6 m = _____ cm	10) 17.45 m = _____ cm
11) 79.21 m = _____ cm	12) 28.64 m = _____ cm
13) 87.9 m = _____ cm	14) 3 m = _____ cm
15) 3.49 m = _____ cm	16) 25.3 m = _____ cm

Name : _____ Score : _____ B

Metric Unit Conversion - Length

T1S1

Example 1 : 2.29 km = _____ m	Example 2 : 2290 m = _____ km
1 km = 1000 m 2.29 km = 2.29 x 1000 m **= 2290 m**	**1000 m = 1 km** 2290 m = $\frac{2290}{1000}$ **= 2.29 km**

Convert the following kilometers (km) to meters (m).

1) 71.321 km = _____ m	2) 83.2 km = _____ m
3) 42.59 km = _____ m	4) 62.354 km = _____ m
5) 8.7 km = _____ m	6) 36 km = _____ m
7) 94.91 km = _____ m	8) 26.6 km = _____ m

Convert the following meters (m) to kilometers (km).

9) 56120 m = _____ km	10) 47231 m = _____ km
11) 6210 m = _____ km	12) 15300 m = _____ km
13) 12000 m = _____ km	14) 89990 m = _____ km
15) 38400 m = _____ km	16) 20690 m = _____ km