

True or False

Follow the instructions to complete the activity.

NAME

DATE

Using information found in the book, verify whether the following statements are true or false. Check your answers in the book. List the page number where you found the information beside your answer.

Statement 1 Gravity affects all objects. It pushes them away from one another.

True Page Number

False

Statement 2 Isaac Newton discovered that the force of gravity depends on the mass of each object.

True Page Number

False

Statement 3 Gravitational fields are invisible.

True Page Number

False

Statement 4 The way each object reacts to gravity depends on its own mass.

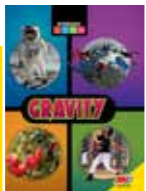
True Page Number

False

Statement 5 The strength of the gravitational force between Earth and the Sun is not the same on both objects.

True Page Number

False



Test your knowledge of gravity by answering these brain teasers.

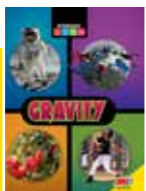
1. What is gravity?

2. What did Newton study?

3. What affects gravity?

4. What holds the planets in orbit around the Sun?

5. What causes the tides?



Fill in the Blanks

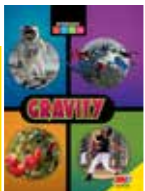
Follow the instructions to complete the activity.

NAME

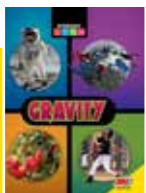
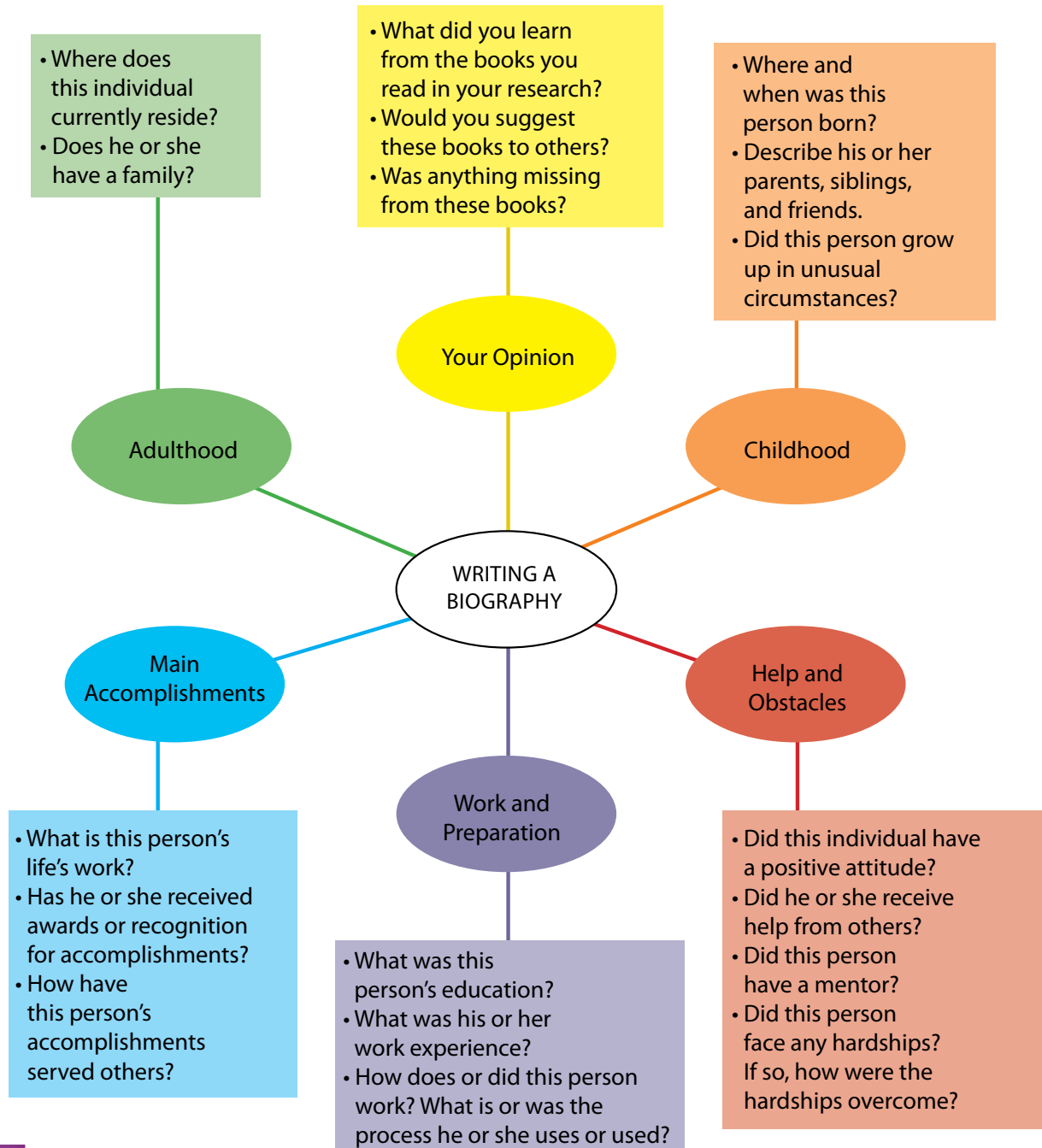
DATE

Using the information found in the book, fill in the missing information below.

1. Gravity is what a baseball toward Earth.
2. Any two objects exert forces on each other. These two forces are in strength and in direction.
3. Earth the Sun, which is a star.
4. The Sun's gravity holds the in orbit.
5. Gravity affects the motion of a object more than the motion of a larger object.
6. All objects have mass. That means every object is surrounded by its own field.



Many scientists have contributed to the study of gravity. Research online, and choose a scientist that you are interested in learning more about. Then, try researching and writing a biography about that person using this concept web as a guide.



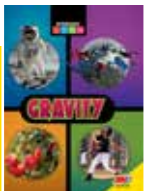
Write a Letter

Follow the instructions to complete the activity.

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After completing the activity on pages 26–27, write a letter to a friend describing it. The letter should expand on your most important discoveries from the activity. What was the result? Was the activity difficult to do? What did you learn from it?



Quiz

Test your knowledge by answering these quiz questions.

NAME

DATE

1

Why does a baseball fall to Earth?

2

How does gravity affect all objects?

3

What fruit made Isaac Newton start thinking about gravity?

4

Does the gravity of faraway stars have much effect on Earth?

5

Is gravity a force?

6

How does gravity affect the oceans?

7

What two things affect an object's gravity?

8

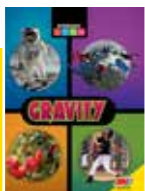
Is gravity important in sports?

9

Where is the center of mass between two objects that are exactly the same?

10

Is gravity stronger on Earth or the Moon?



Key Words Match-Up

Write the words from the list below in the box above the correct definition for each word.

NAME

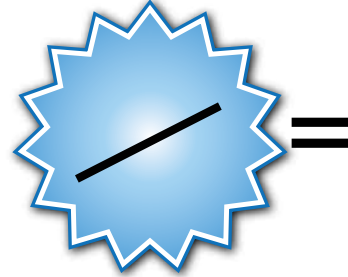
DATE

KEY WORDS

exert
invisible
mass

orbits
tides
universe

Your
Score is



%

1.
daily rises and falls in sea level

2.
the amount of matter in an object

3.
to apply or make use of

4.
repeatedly travels around another object
because of gravity

5.
not able to be seen

6.
everything that exists

