

Matter Detectives

Read for clues that show matter has mass and takes up space.

2.3.a "matter has mass and takes up space;"

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each thing that is matter. Circle the words that tell how it has mass or takes up space.

Maya Investigates Matter

- ① At the science table, Maya put a pebble on one side of a balance and cubes on the other. She added cubes until the sides were level. The pebble had mass because it needed three cubes to balance it.
- ② At the next table, she dropped marbles into an empty cup. The marbles filled part of the cup. When she added water, the water rose around them. The marbles took up space, so less room remained for water.
- ③ Maya compared a sponge with air in an open bag. Both were matter. The sponge could be weighed and filled space in a bin. Air also had mass and took up space, even though Maya could not see it.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 What showed that the pebble had mass?

2 Why did the water rise when Maya put marbles in the cup?

3 What does the passage say about air that shows air is matter?

3 YOUR TURN _____ Your own words

Choose an object that is not named in the passage. Write two sentences that tell how it has mass and how it takes up space.

PART 1 • READ AND MARK

Underline each thing that is matter. Circle the words that tell how it has mass or takes up space. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What showed that the pebble had mass?	It needed three cubes to balance it on the balance.
2	Why did the water rise when Maya put marbles in the cup?	The marbles took up space in the cup.
3	What does the passage say about air that shows air is matter?	Air has mass and takes up space.

PART 3 • YOUR TURN (SAMPLE ANSWER)

A banana has mass because it can be weighed. A banana takes up space because it fills part of a lunch box.

Accept answers that correctly connect an object's mass to weighing or balancing and its space to the room it fills. For the open response, accept any new object with two accurate explanations.