

Tiny Shade Shelter

Use a model to test and improve a design.

2.1.G "develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB In paragraph 2, number the three sentences 1, 2, and 3 in the order they appear. These sentences tell what each material represents in the model.

A Shelter Model

- ① Ms. Lee's class wanted to keep a small ice cube from melting in the sun. They planned a tiny shade shelter. Before building a full shelter, the class made a model with craft sticks, paper, and tape.
- ② The craft sticks stood for the strong shelter frame. The paper stood for the wide roof and made shade. The tape stood for fasteners and held the model parts together.
- ③ Next, students put an ice cube under the paper roof and watched it for ten minutes. The model showed that a roof can block some sunlight. The class chose thicker paper for the next model because it could make more shade.

2 ANSWER WITH EVIDENCE Use the passage

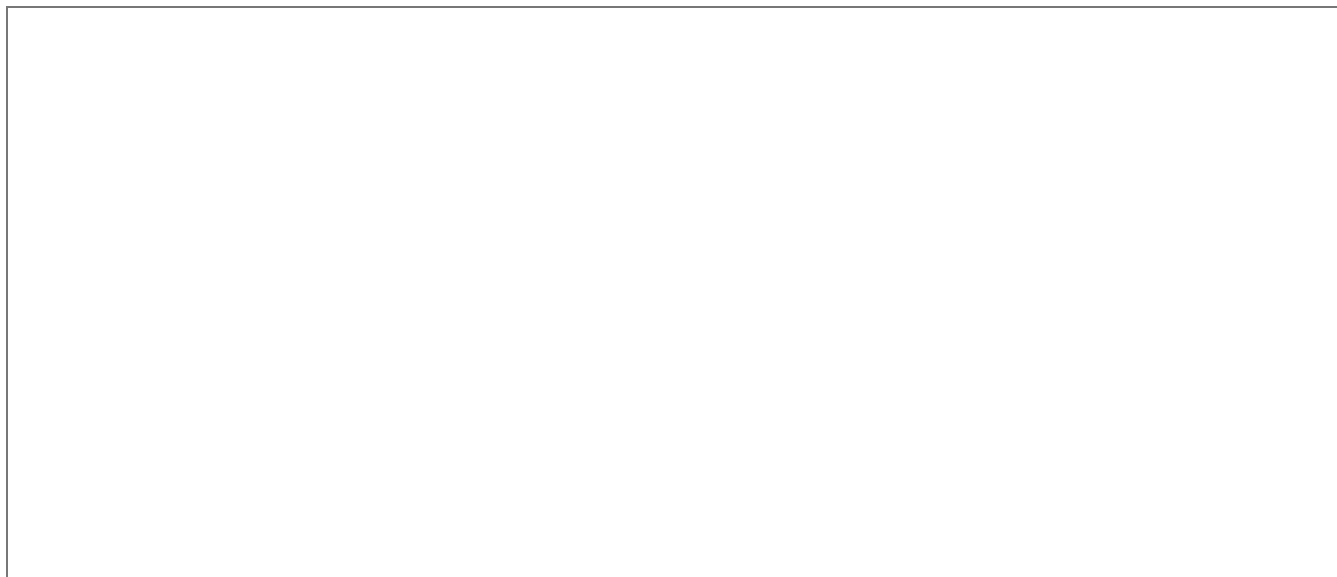
1 Which material in the model stood for the shelter frame?

2 How did the students use the model to test their shelter idea?

3 What change did the class choose for the next model? Why?

3 YOUR TURN Your own words

Draw a model for a cover that keeps a seedling dry during rain. Label three materials in your model and tell what each material represents or does.



PART 1 • READ AND MARK

In paragraph 2, number the three sentences 1, 2, and 3 in the order they appear. These sentences tell what each material represents in the model. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	Which material in the model stood for the shelter frame?	Craft sticks.
2	How did the students use the model to test their shelter idea?	They put an ice cube under the paper roof and watched it for ten minutes.
3	What change did the class choose for the next model? Why?	They chose thicker paper because it could make more shade.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Sketch: a paper roof above four straw posts around a seedling. Labels: paper, roof; straws, posts; tape, holds the roof to the posts.

Accept any sensible model that shows a cover over a seedling and includes three labeled materials. Each label should tell what the material represents or how it helps the model work.