

Sample Multiple-Choice Question

For this type of question, select the best answer and fill in the circle next to the answer you choose. For example:

According to the passage, which question would a weather report answer?

- (A) Where are we?
- (B) What time is it?
- (C) Who are you?
- (D) How hot is it?

The correct answer is D. The circle with the D in it has been filled in to show that D is the correct answer.

Sample Open-Ended Question

For this type of question, you will write several sentences on the lines provided. For example:

According to the passage, weather is the condition of the air in a certain time and place. Why would it be important to know what the weather is today or what it will be tomorrow? Be sure to use examples or ideas from the passage or your own life to support your answer.

It is important to know what the weather is so you can plan what you are going to do. If you decide to go swimming, but you don't know what the weather is going to be like, you could find yourself swimming between the raindrops or the snowflakes!

[These are the first two sentences of a good answer.]



Directions: Read the article and answer the questions that follow.

Rocket Balloon

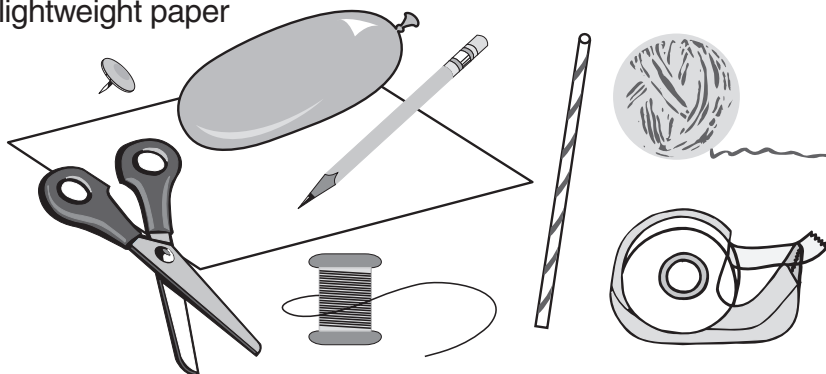
Compiled and created by Laura Buller and Ron Taylor

Illustrations by John Hutchinson and Stan North

If you blow up a balloon and then just let it go without tying the neck with a piece of string, the air will rush out of the balloon and send it zooming around the room, with no pattern to its flight. The following experiment will show you how to make the balloon fly in a straight line.

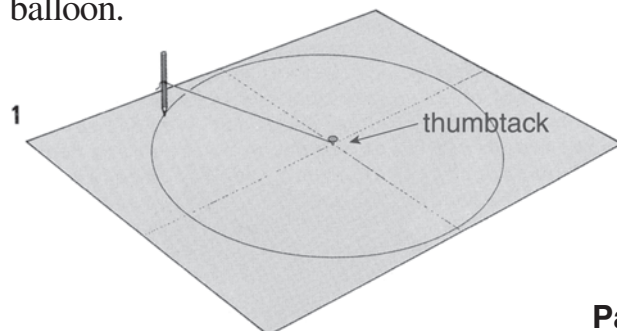
You Will Need—

- Thumbtack
- 32-inch by 26-inch sheet of lightweight paper
- Pencil
- String
- Scissors
- Cellophane tape
- 2 yards of thread
- Drinking straw
- High-back chair
- Balloon



PROCEDURE

1. For this experiment you will need a thumbtack, a sheet of lightweight paper about 32 inches by 26 inches, a sharp pencil, a piece of string at least 18 inches long, a pair of scissors, clear cellophane tape, about two yards of thread, a drinking straw, a high-backed chair, and a long, thin balloon.



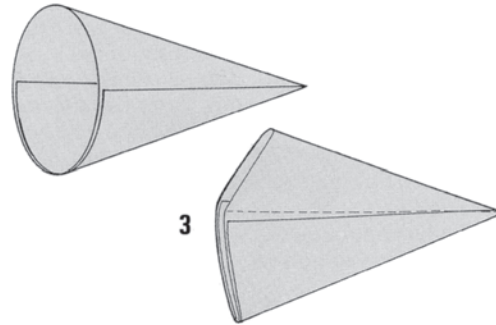
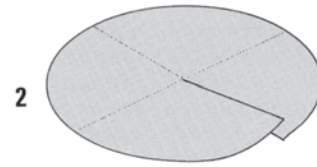
2. Fold the sheet of paper exactly in half vertically and then fold the sheet of paper exactly in half horizontally. Attach one end of the string to the pencil and then make a loop in the other end of the string. Put the thumbtack through the loop of string and place it in the middle of your sheet of paper, where the two folds cross. Be careful of the point of the thumbtack.

3. Draw the biggest circle that will fit onto your sheet of paper as shown.

DO NOT WRITE IN THIS AREA.



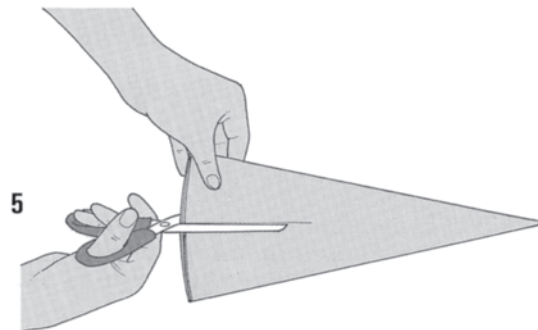
4. Cut out the circle using the scissors; then cut along one fold from the edge of the circle to the center. Overlap the edges of the circle and form a cone with a base diameter of about eight inches.



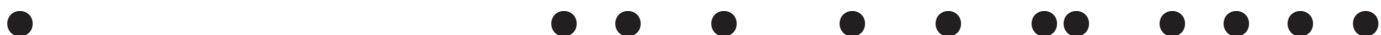
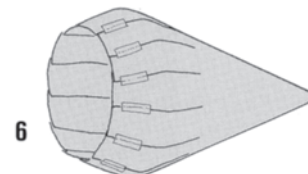
5. Flatten the cone with your hand to make a triangle and then fold this in half. Next, fold the triangle in half again.



6. Make a cut from the base of the triangle, through all the layers of paper, to about halfway up. Next, open out the shape until it forms a cone again.



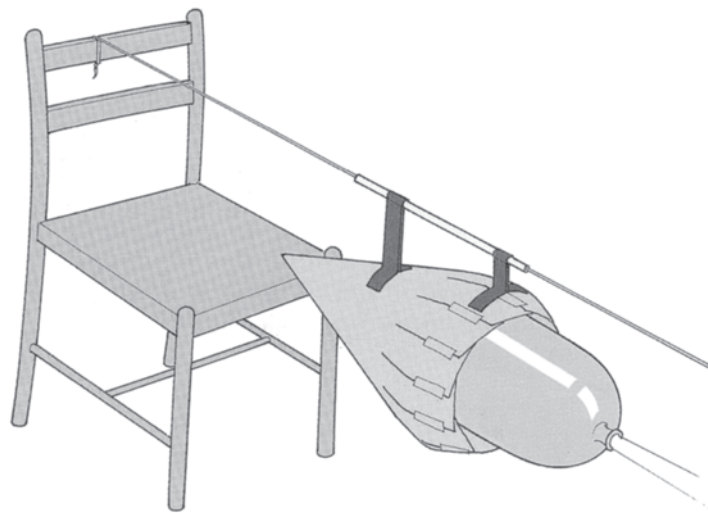
7. Carefully overlap the cut sections and stick one to another with cellophane tape.



8. Tie one end of your thread firmly to the door handle. Slip the drinking straw onto the thread; then tie the loose end to the back of a chair. Adjust the position of the chair so that the thread is pulled taut.

9. Using the cellophane tape again, firmly tape the paper cone (rocket) to the drinking straw, using the diagram as a guide.

10. Blow up the balloon and, holding the end tightly so that the air does not escape yet, push the balloon firmly inside your paper rocket. Now let go. The air coming out of the balloon creates the energy needed to make the rocket move. The straw on the thread keeps the rocket flying in a straight line, thus controlling its flight.



When you have mastered the technique, you can make several rockets and have a lot of fun having races with your friends. Increase the length of the thread between the door and the chair, or try several other shapes of balloons and see what difference these alterations make to the speed of the rocket. With a stopwatch, time how long the journey from the chair to the door takes and see if there is anything you can do to speed up the rocket.



DO NOT WRITE IN THIS AREA.



8. The purpose of the first paragraph is to

- Ⓐ introduce the rocket balloon experiment.
- Ⓑ give a summary of the steps in the experiment.
- Ⓒ explain how balloons can fly in a straight line.
- Ⓓ explain how to make a cone to hold the balloon.

9. Which material is used to fasten the rocket to the thread?

- Ⓐ string
- Ⓑ pencil
- Ⓒ thumbtack
- Ⓓ drinking straw

10. What does the word "taut" mean in the following sentence: "Adjust the position of the chair so that the thread is pulled taut"?

- Ⓐ up
- Ⓑ down
- Ⓒ tight
- Ⓓ loose



11. What does the word *alterations* mean in the last paragraph of the article?

- (A) races
- (B) shape
- (C) length
- (D) changes

12. What is the purpose of the thumbtack?

- (A) to find the center of the paper
- (B) to hold the string in the center
- (C) to fasten the cone to the balloon
- (D) to poke a hole in the paper

13. What material in the experiment could not be substituted?

- (A) chair
- (B) straw
- (C) balloon
- (D) string



For the open-ended question on the next page, remember to

- Focus your response on the question asked.
- Answer all parts of the question.
- Give a complete explanation.
- Use specific information from the article.



