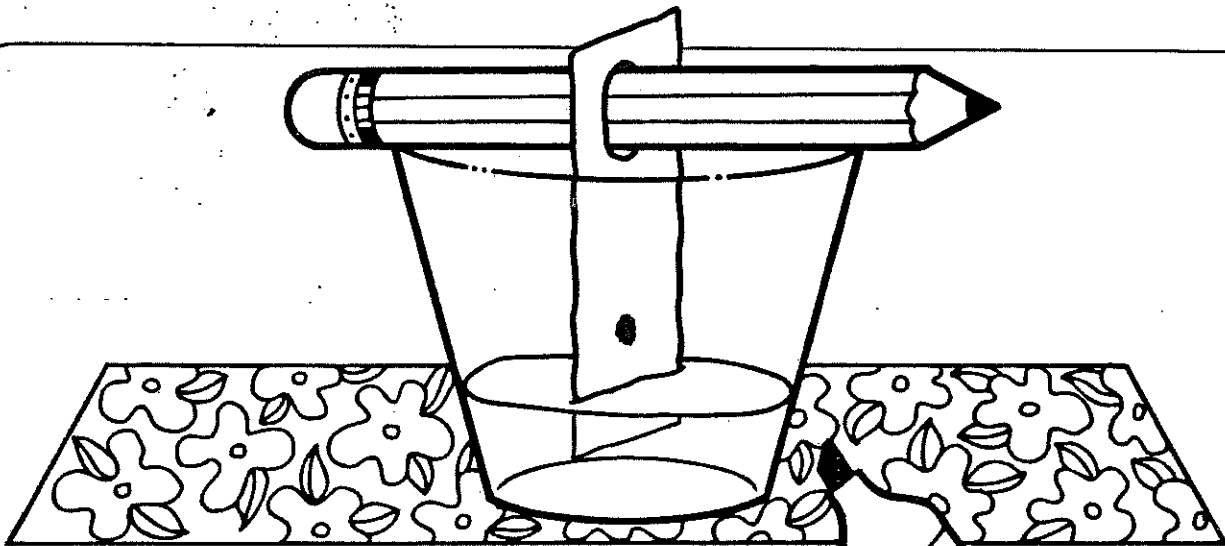


What Color Is It?



Question:

What will happen when the water touches the purple ink on the strip of paper?

Materials:

- clear drinking glass
- water
- purple felt-tipped marking pen (not permanent)
- strip of paper towel
- pencil

What do you think will happen?

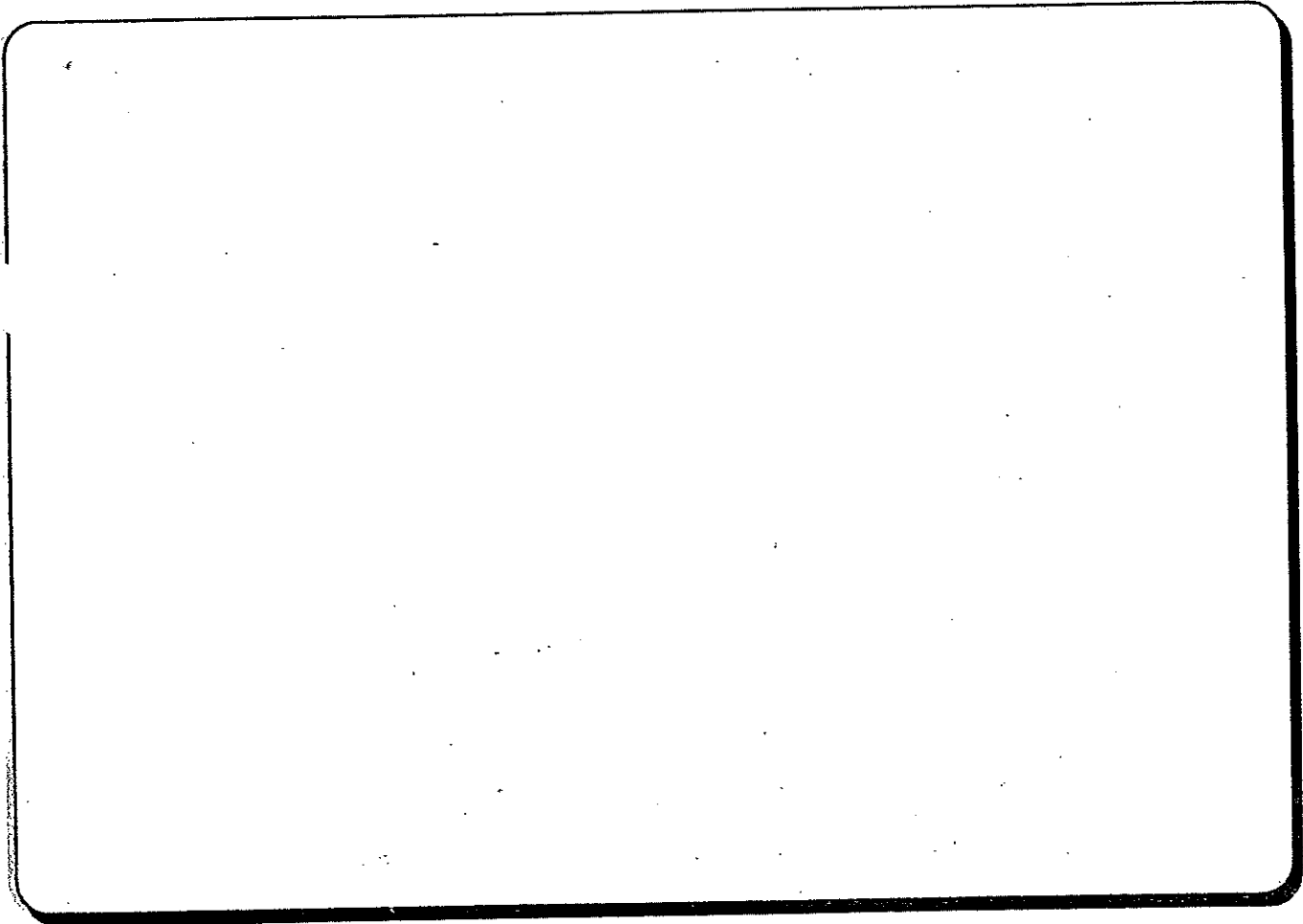
- 1. The purple ink will disappear.
- 2. The purple ink will separate into colors.
- 3. Nothing will change.
- 4. The water will turn purple.

Follow these steps:

1. Cut a strip of paper towel 4" X 1 1/2" (10 cm X 4 cm).
2. Put a spot of ink near one end.
3. Make a hole near the top of the other end and put a pencil through it.
4. Hang the strip of paper in the glass. Put just enough water in the glass to reach the bottom of the paper strip. Don't let the water touch the ink spot.
5. Wait about 15 minutes. See what happens.

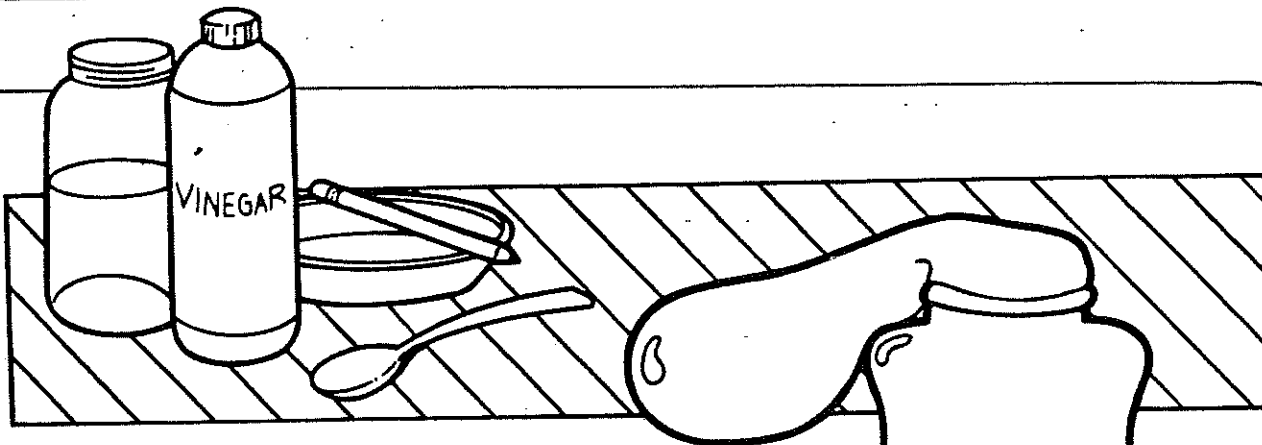
Write what happened in the experiment.
Then draw a picture showing what happened.

? What ?
Happened
?



Explanation:
When the water touches the dried ink, it dissolves the molecules in the colors that make the color purple. The colors move up the paper at different speeds and separate into lines of different colors. Scientists use this method to help them identify the parts of unknown substances.

Balloon Mystery



Question:

What will happen to a balloon stretched over the open end of a bottle in which steel wool is rusting?

Materials:

- steel wool
- vinegar
- water
- pencil
- balloon
- spoon
- soft drink bottle

What do you think will happen?

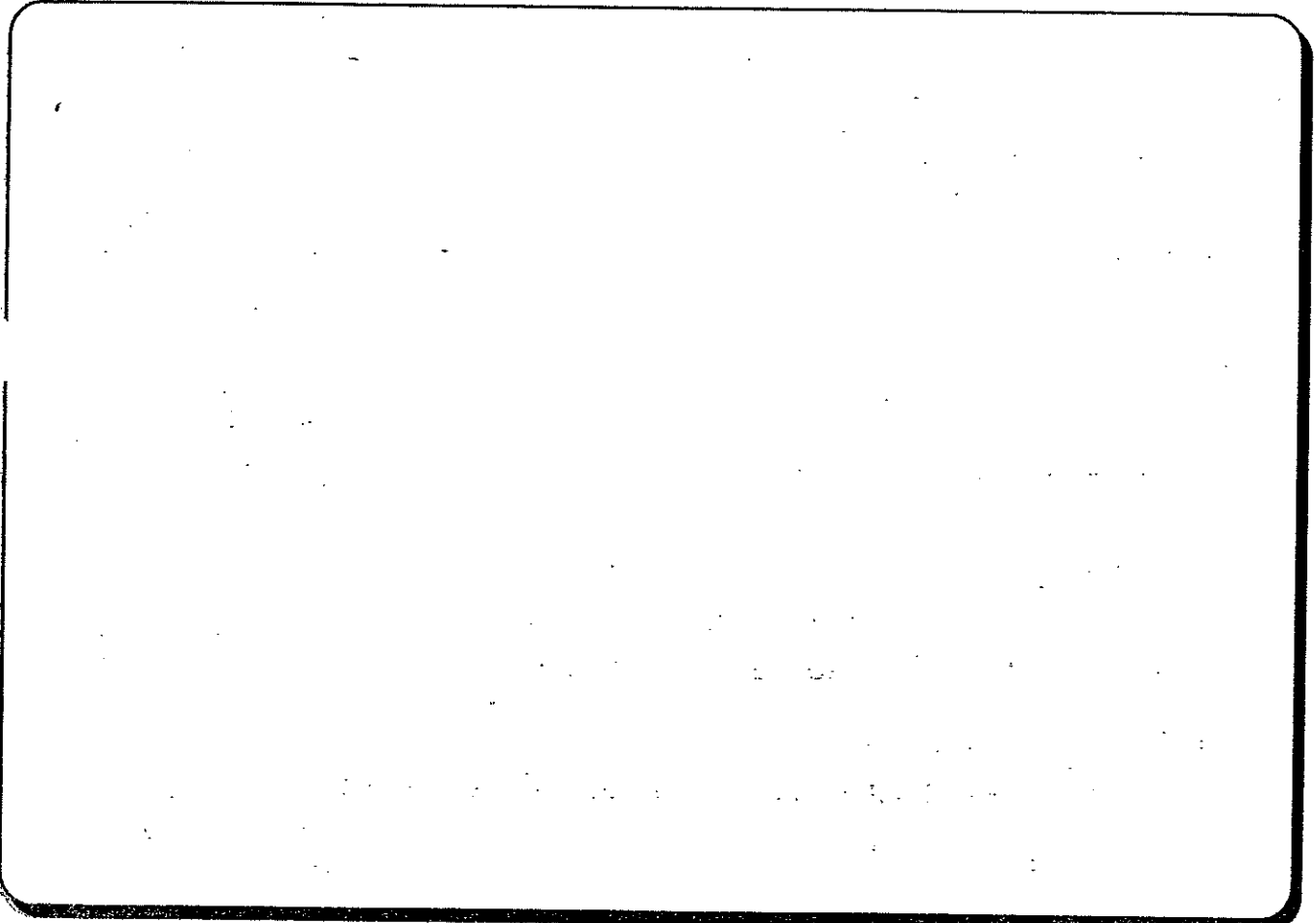
- 1. The balloon will fly off the top of the bottle.
- 2. The balloon will get bigger (inflate).
- 3. The balloon will change color.
- 4. The balloon will be pulled into the bottle.

Follow these steps.

1. Take a piece of steel wool about the size of an egg. Soak the steel wool in vinegar for a few minutes. Take it out of the vinegar.
2. Use the pencil to help you poke the steel wool into the bottle.
3. Put five drops of water into the bottle.
4. Stretch the balloon over the opening of the bottle.
5. Let the bottle sit until the steel wool starts to rust. Watch what happens. (This may take about 24 hours).

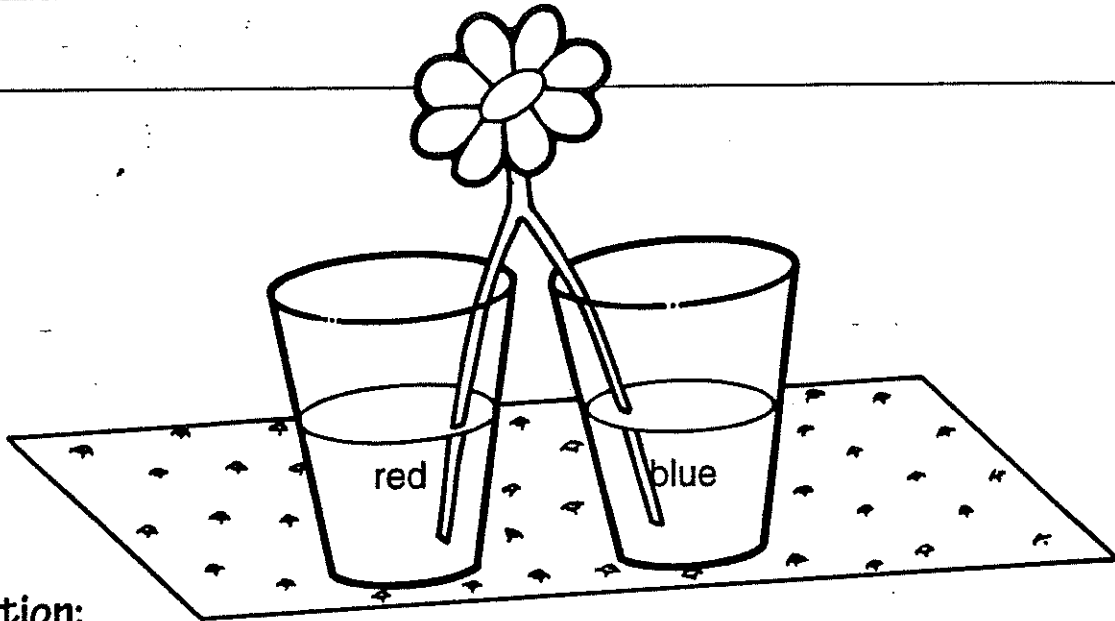
Write what happened in the experiment.
Then draw a picture showing what happened.

? What ?
Happened
?



Explanation: When steel wool rusts, it takes oxygen from the air and makes iron oxide (rust). This makes less air pressure in the bottle. The greater air pressure outside the bottle pushes the balloon down into the bottle.

Thirsty Flower



Question:

What will happen to the flower with a split stem when it is placed in two glasses as show?

Materials:

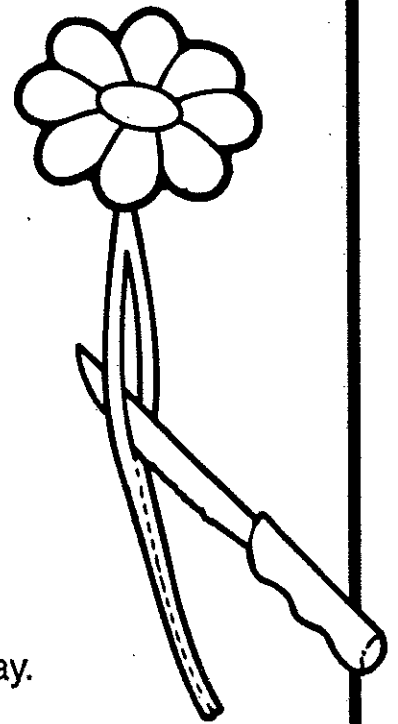
- knife
- water
- white flower (carnation or daisy)
- 2 drinking glasses
- red and blue food coloring

What do you think will happen?

- 1. The flower will wilt.
- 2. Both sides of the flower will stay white.
- 3. The two sides will become different colors.
- 4. Both sides will turn to the same color.

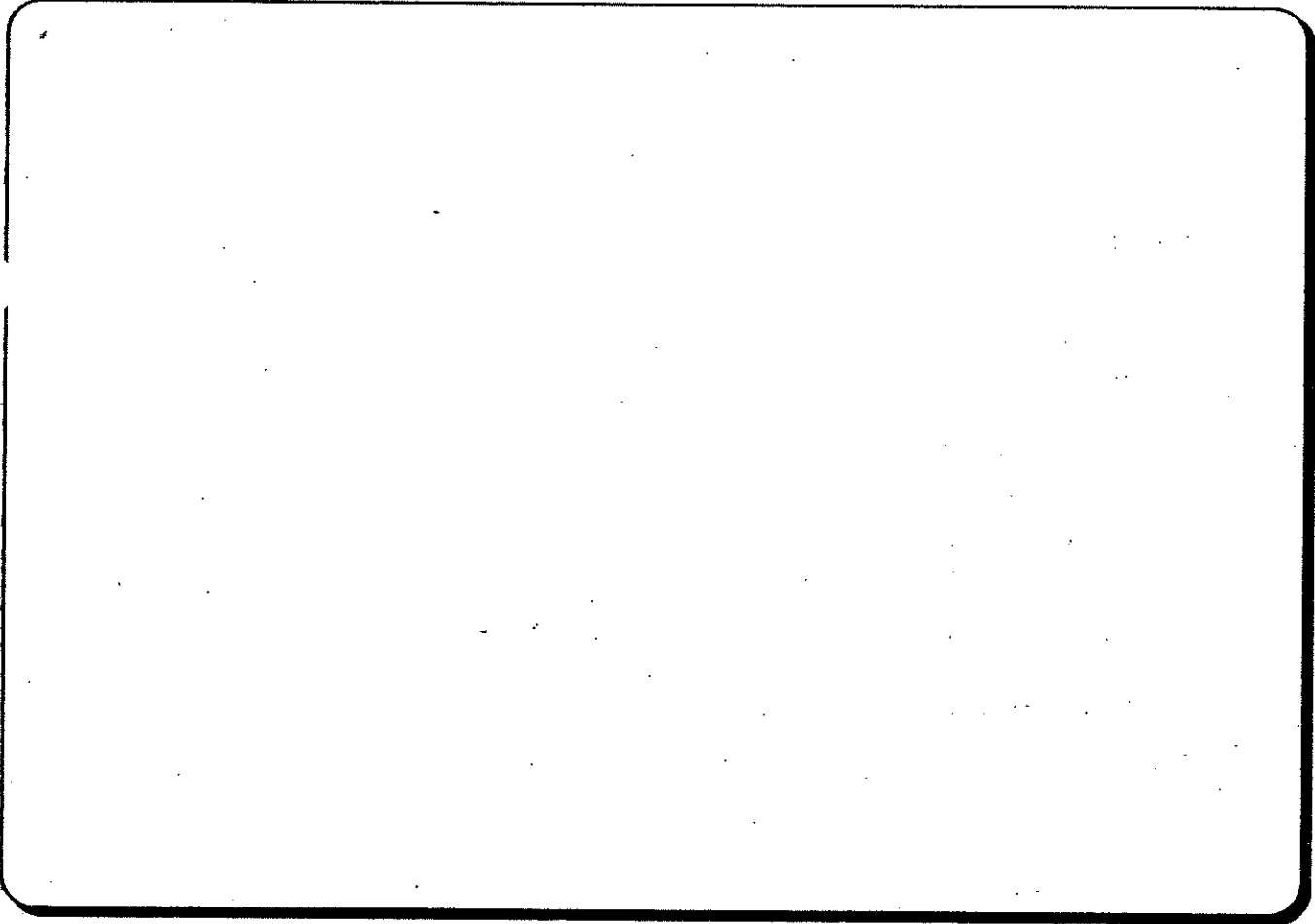
Follow these steps:

1. Get your parent to cut the flower stem in half the long way.
2. Fill the glasses 1/2 full of water.
3. Put a drop of food coloring in each glass. Put a different color in each glass.
4. Put one section of the stem in each glass of water.
5. Let the flower sit overnight.
6. What happened?



? What ? Happened ?

Write what happened in the experiment.
Then draw a picture showing what happened.



Explanation: Plants carry water from the roots to other parts of the plant through tiny tubes. This is called capillary action. The food coloring lets you see that the water has moved up the plant and where it has gone.