



## ~ Fun Activities ~

Use the scientific method sheet to create these experiments. Following on another page are the conclusions. Try not to look at the conclusion until after you demonstrate this experiment on your own. There are blank scientific method sheets to use in this pack. This is the information to get you started.

Be sure to enter your: hypothesis, observation and conclusion. If you do not know the answers, you may consider additional research in books or online.

### **Experiment One: Sound**

Demonstrate the effect of sound waves on the ear drum.

Question: How does the ear drum work?

Materials: Clear wrap, rice grains uncooked (10-40), a pot, metal pot lid, wood spoon (or some other way to make loud sounds).

Procedure: What I do: (Procedure): Make a model of the eardrum.

1. Stretch a piece of plastic wrap over a bowl or metal pot. Be sure the wrap is tight. The plastic wrap represents the eardrum.
2. Place 10-40 uncooked rice grains on top of the tight plastic wrap. Be sure not to dent or pierce the wrap

Create sound waves. Make noise! Hold the metal lid (drum or even a metal cookie sheet will work) beside the rice on the plastic wrap. Hit the object to make a "sound wave" or a "loud noise" and observe. What happens?

### **Experiment Two: Touch**

Use your sense of touch to identify objects.

Question: Can your touch identify objects?

Materials: What I do: (Procedure): Use your sense of touch to identify objects.

1. Take turns doing this with several other people.
2. Place 5-6 objects of different kinds into a pillow case.
3. Have one person feel (without looking!) the objects in the case.
4. They must identify the object just with their touch and nothing else.



5. What happens?

Procedure:

1. Take turns doing this with several other people.
2. Place 5-6 objects of different kinds into a pillow case.
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### **Experiment Three: Touch**

Question: Does your skin receptors register the same all over your body?

Materials: Paper clip, blindfold, paper.

Use your sense of touch to feel.

1. Take turns doing this with only one person at a time.
2. Take a paper clip and bend it into a U shape.
3. Identify where the paper clip ends touch your skin.
4. Blindfold each person. Another touches their arm, leg or skull lightly with the U shaped paper clip.
5. What happens? [Hint: do you feel both edges at once or just one?]

### **Experiment Four: Smell**

Use your sense of smell to identify objects or foods.

Question: Can your sense of smell identify food times or other smells?

[Additional Research: How does smell and taste combined improve the correct answers to the items?]



Materials: A blind fold, assorted foods or smelly objects, etc. A sharp knife (parents please supervise), and cutting board. A paper to write or draw.

1. Take turns doing this with several other people. Blindfold one person at a time.
2. Use food such as a lemon, onion, chocolate, or other fragrant items. Allow the children to smell food items first. Then taste where appropriate.
3. Use items such as smelly socks, perfume, powder, soap, etc. ONLY SMELL these!
4. Each person must identify the object just with their smell and/or taste and nothing else.
5. What happens?

#### **Experiment Five: Hearing.**

Question: What sounds can you identify without using your eyes and only your hearing?

[Note: no talking allowed! Just listen.]

Materials: A blind fold, a kitchen timer, the inside of a house, a kitchen, a bathroom, and outdoors. A paper to write or draw.

Procedure: Use your sense of hearing identify different sounds.

1. Everyone can do this at the same time. No talking! Use a blindfold to be fair. Everyone uses the blindfold or closes their eyes. No cheating!
2. Listen without making any noise. Use a timer to listen quietly for 1-2 minutes. More time for older students.
3. Record what you hear in each room. Do this outdoors.
4. Each person must identify the objects they hear.

Experiment: Sight

Question: Is your depth perception impaired when you use one eye instead of two?

Materials: A coin (penny or quarter), an empty plastic cup-type of container or small juice cup without a lid. A paper to write or draw.

Procedure: Use one eye instead of two to judge distance.



1. One person places a cup on a table and holds a penny over the cup about 18-30 inches above the surface. This person moves the penny around over the top of the cup. The object is to drop the penny in the cup when the other person watching tells them to do so.
2. The other person judges the distance over the cup by closing on eye. No cheating!
3. With one eye closed the person instructs the other (with penny) when to drop the coin.
4. What happens? (Try this with both eyes opened.)

# SCIENCE EXPERIMENTS

**Question:** \_\_\_\_\_

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**Hypothesis:** \_\_\_\_\_

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**Materials:** \_\_\_\_\_

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**Procedure:** \_\_\_\_\_

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**Observation/Data:** \_\_\_\_\_

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