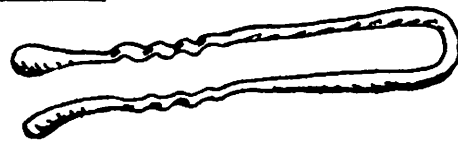
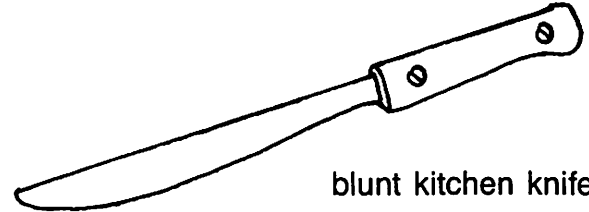


# Dancing Hairpin

## You Will Need



hairpin

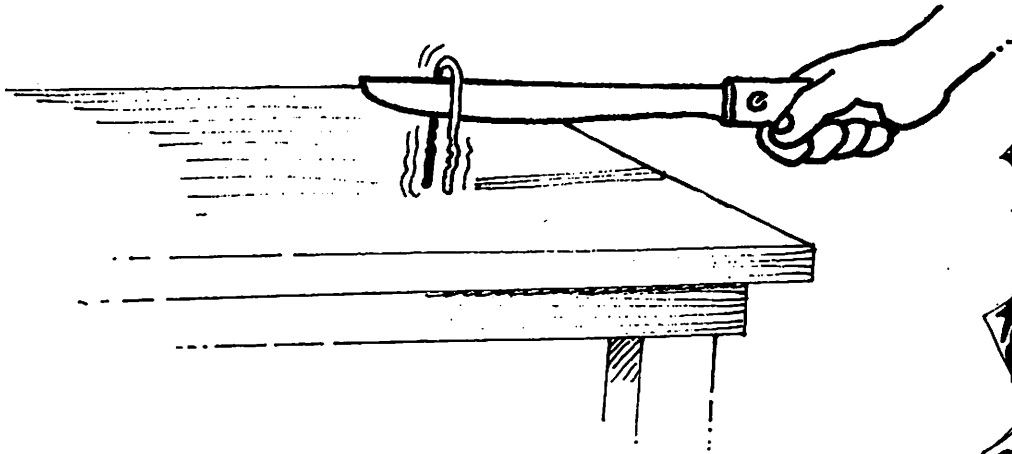


blunt kitchen knife

## Here's How

*Write your hypothesis before completing this step.*

1. Place the hairpin over the knife blade and hold the knife parallel to the table so that the "legs" of the hairpin just barely touch the surface.
2. Try to hold very still. What happens? *Record what happened on the back.*
3. Try this again with your other hand. ➔



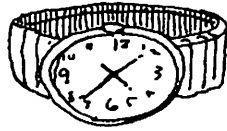
## Questions

*Answer on the back of this page.*

1. What happened to the hairpin when you tried to hold still?
2. Were you able to keep the hairpin from moving?
3. Why do you think the hairpin continues to move even though you try to stop it?

# Exercise and Pulse Rate

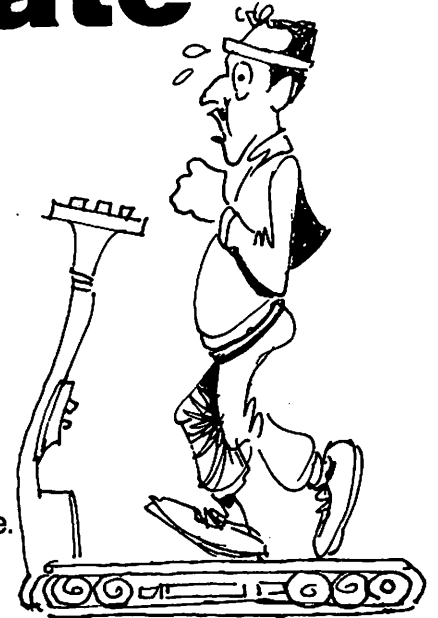
## You Will Need



watch or clock with second hand

## Here's How

1. While sitting quietly, find your wrist pulse and count it for one minute.
2. Record the number of at-rest beats per minute on the chart.
3. Run in place for two or three minutes and take pulse rate again.
4. Repeat procedures 1-3 twice and take an average by adding the three pulse rates together and dividing by three.



## Pulse Rate Chart

	Test No. 1	Test No. 2	Test No. 3	Average
Resting Pulse				
Exercising Pulse				

## Questions

1. How did resting pulse rate differ from exercising pulse rate?
2. What was the average difference in beats per minute between the two categories?
3. What do you think would happen if your heart rate didn't vary with exercise? How would this affect your ability to perform daily activities?

## Science 5-8 NTID Days 28-30

Your assignment for Days 28-30 is to construct and erupt a volcano. You can use whatever you want to build the volcano (play-doh, modeling clay, etc.), but it must be built (not just a soda bottle!). Please do not go out and spend a bunch of money to do this project. If you need supplies to build with, send me an email, and I will ensure you have what you need. Siblings may work on this project together, but please ensure that everyone is contributing to the project. If you want to add props to the volcano (trees, dinosaurs, action figures, etc.) you may, but it is not required.

For your grade, I need pictures of the volcano while it is being built, when it is completed, and during eruption—you can send a video of this part, if you want. You must provide multiple pictures so don't forget to take them during the process. Your grade will be based on the information on the following page. If you work with siblings, both siblings must submit the page for a grade; however, only one sibling must submit the pictures to me through email.

The first step in this project is **Research**. You need to research to find out how volcanoes develop, where volcanoes develop, what causes volcanic eruptions, how to build a model of a volcano, and which substances can be used to model a volcanic eruption. (There is a place on the next page for you to record your research.)

The next step in this project is **Construction**. Be sure to make a list of all the materials you are using. Also, be sure to have someone take pictures of you while you construct your volcano. You can be as creative as you want with this step. If you want to include props (as mentioned above) you can, but they are not required.

Next is **Eruption!** Your grown-ups will most likely want you to go outside for this part! Remember to have someone take pictures (or a short video) of your eruption.

After the eruption, complete the **Questions**.

Finally, **Communicate Your Results** by sending your pictures (and/or video) and your information sheet to me through e-mail.

I hope you have fun with this project!

**Volcano Research:**

**Materials:**

- 
- 
- 
- 
- 

**Eruption:**

Describe the eruption of your volcano. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

What could have made your eruption different? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

What did you enjoy most about this project? \_\_\_\_\_

\_\_\_\_\_