

Investigating Physical Fitness

WHAT YOU NEED



pastel-colored stick
of chalk

Find Out

Do this activity to find out how physically fit your classmates are based on the amount of time spent doing different activities.

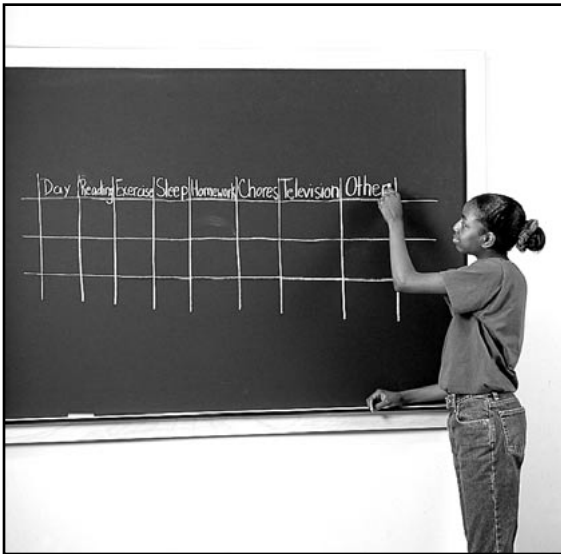
Process Skills

Observing
Communicating
Classifying
Interpreting Data

Time

- 5 minutes each day for two weeks
- 30 minutes on the last day of the second week

WHAT TO DO



1. Every day **record** the amount of time spent doing different activities. **Classify** these activities and **record** the time spent doing each on the chart.
2. At the end of two weeks gather all the charts and total each column on the chalkboard. This is the master chart.

3. **Analyze** and **record** how much time the students in your class spent doing each activity. **Determine** which activities are good for health and fitness and which do not promote physical fitness.

Time Spent Doing Activities

Day	Reading	Exercise	Sleep	Homework	Chores	Television	Other
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							

Conclusions

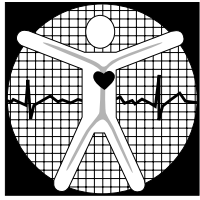
1. Based on the master chart, do you think your class has a healthful balance of exercise, work or study, and relaxation?
2. What activities promote physical fitness and which do not?
3. What changes would you make in your own habits for better fitness?

New Questions

1. Why is it important to have good fitness habits?
2. How do the foods you eat affect physical fitness?



Name _____



ACTIVITY

Investigating Muscles and Bones

Predict what parts of the muscular and skeletal systems you will see in the chicken leg and thigh.

What muscles and bones in the leg and thigh do you see? Draw and **label** what you observe. **Record** what happens to the muscles when you bend and straighten the leg and thigh at the joint.

Draw and **label** the bone joints, ligaments, and cartilage that you observe. **Classify** the parts you saw under the correct system.

Skeletal System

Muscular System

Activity Journal

Lesson 1 • Support and Movement

Name _____

Conclusions

① What kind of joint did you find between the thighbone and the lower leg of the chicken?

② What parts did you find around the joints of the bones?

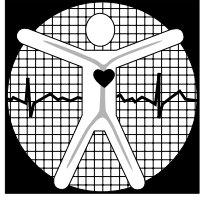
How do these parts function?

Asking New Questions

① Identify which muscles contract and relax when a chicken lifts its leg to walk.

② **Infer** how your leg is similar to a chicken leg in the way it moves.

Name _____



ACTIVITY

Investigating Strength and Endurance

How much water does the plastic jug contain?

How much water can you lift with your arm bent at the elbow? What is the mass of the jug?

How much water can you lift above your head? What is the mass of the jug?

How many times can you lift the jug with your arm bent at the elbow in two minutes or until your muscles feel tired?

Name _____

Conclusions

- ① How was your muscles' endurance investigated?

- ② How was your muscles' full range of motion used?

- ③ How did the amount of weight that you could lift change as you explored strength, flexibility, and endurance?

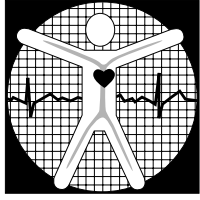
Asking New Questions

- ① Develop a testable question. Plan and conduct a simple investigation based on this question and write instructions that others can follow to carry out the procedure.

- ② Identify the dependent and controlled variables in the investigation.

- ③ Prepare a report of your investigation that includes the tests conducted, data collected, or evidence examined, and the conclusions drawn.

Name _____



ACTIVITY

Converting Energy

What happened when the baking soda and vinegar combined?

Activity Journal

Lesson 3 • Energy in Your Body

Name _____

Conclusions

1 Infer where the potential chemical energy was stored.

2 What object did the kinetic mechanical energy move?

Asking New Questions

1 How was the energy conversion in the activity like the energy conversion that takes place in your muscles?

2 What activity do all cells perform that converts potential chemical energy into kinetic mechanical energy?