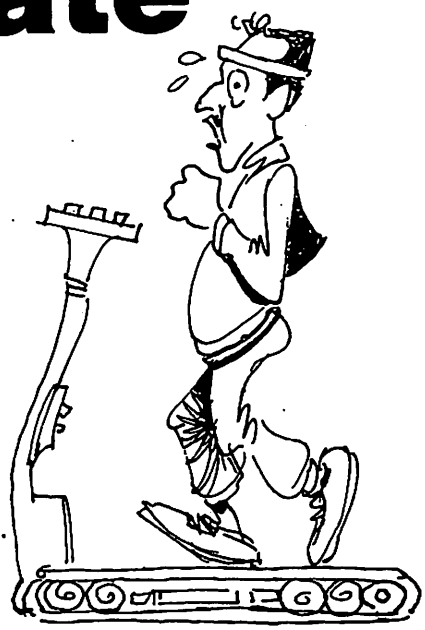
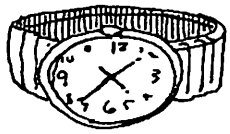
Science Day 3
5-8

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
Name _____ Date _____ Class Weather Packet
Day 4

Inquiry MiniLab — Graphs: 25 minutes

When does lightning strike?

Meteorologists in New Mexico collected data on the number of lightning flashes that occur throughout the day. How can you use a line graph to plan the safest day trip?

Procedure

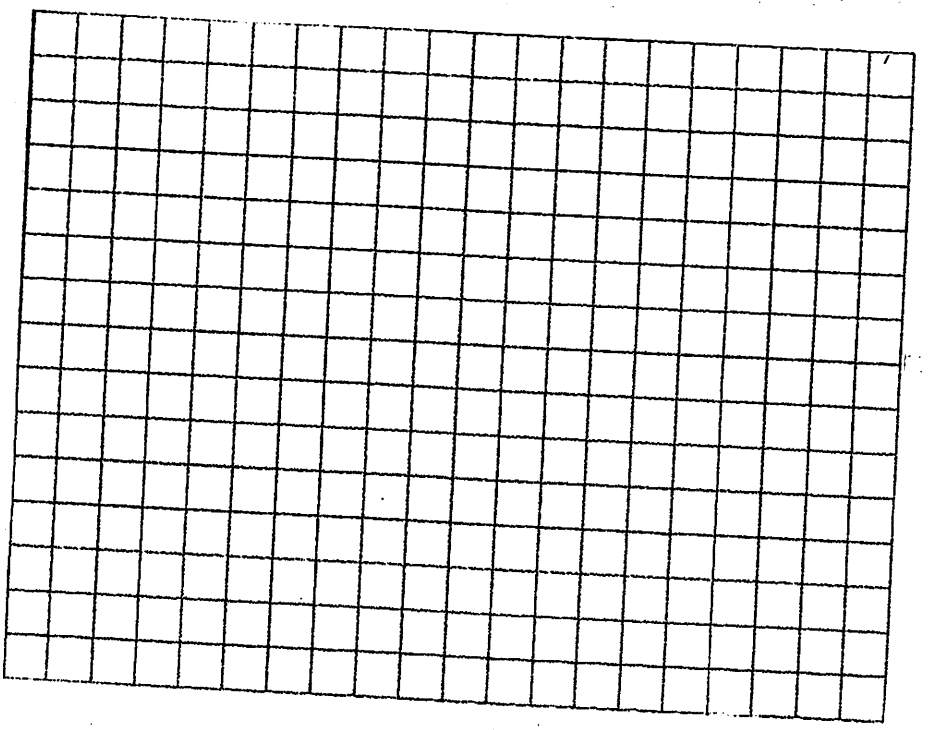
1. In the Data and Observations section below, construct a line graph of the data in the table. (on the back)
2. On your graph, identify the trends that show when the risk for lightning is increasing and when it is decreasing.

Data and Observations

Hour	# of Flashes
12:00 a.m.	2
3:00 a.m.	2
6:00 a.m.	2
9:00 a.m.	2
12:00 p.m.	5
3:00 p.m.	21
6:00 p.m.	36
9:00 p.m.	22
12:00 a.m.	2

Analyze and Conclude

1. **Decide** How could you use your graph to plan a day trip in New Mexico with the least risk of lightning?



Science 5-8
Weather Packet
Day 5

Name _____ Date _____ Class _____

Inquiry MiniLab

Graphs: 30 minutes

What can graphs tell you about polar bears?

A colleague gives you some data she collected about polar bears on Wrangel Island. She observed the condition of bears near Cape Blossom and classified the bears as starving, average, or healthy. She also recorded the age category of each bear. What can you learn by graphing these data?

Procedure

1. On the back, make a bar graph of the number of bears in each category that are starving, in average condition, or healthy.
2. Calculate the number of starving bears. Calculate the total number of bears. Divide the number of starving bears by the total number of bears, and multiply by 100 to calculate the percentage of starving bears. Repeat the calculations to find the percentages of average-condition and healthy bears. Make a circle graph showing the different conditions of the bears. (On the back)

	Starving	Average	Healthy
Adult	3	11	14
Juvenile	4	33	13
Cub	3	12	6
Total			
Percentage			

Total number of bears = _____

Data and Observations

Analyze and Conclude

1. **Analyze** Using your bar graph, indicate how you can tell which age category of bears is the healthiest.

_____

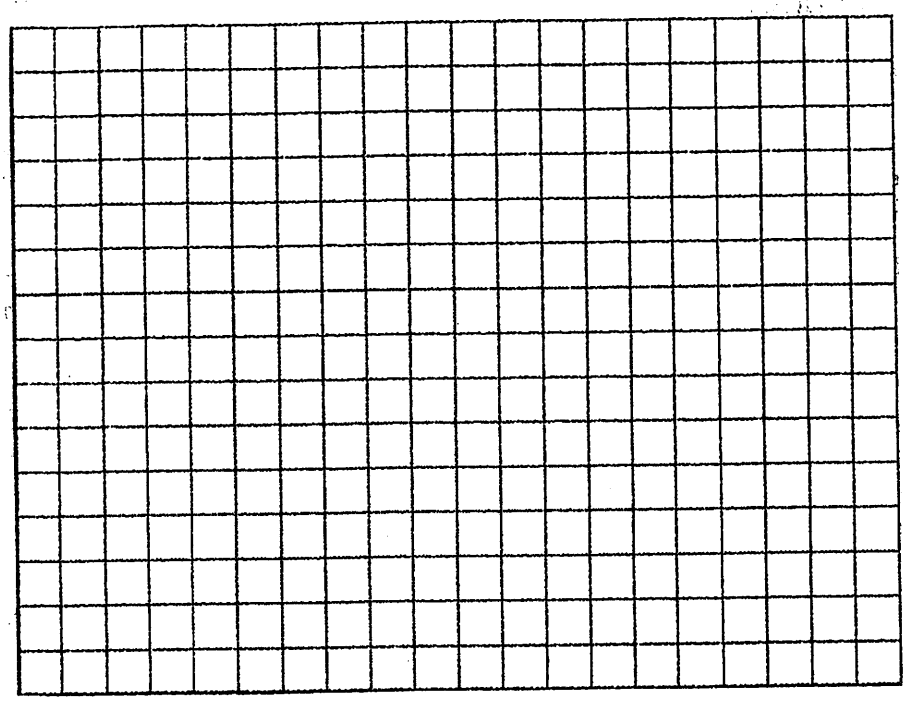
_____

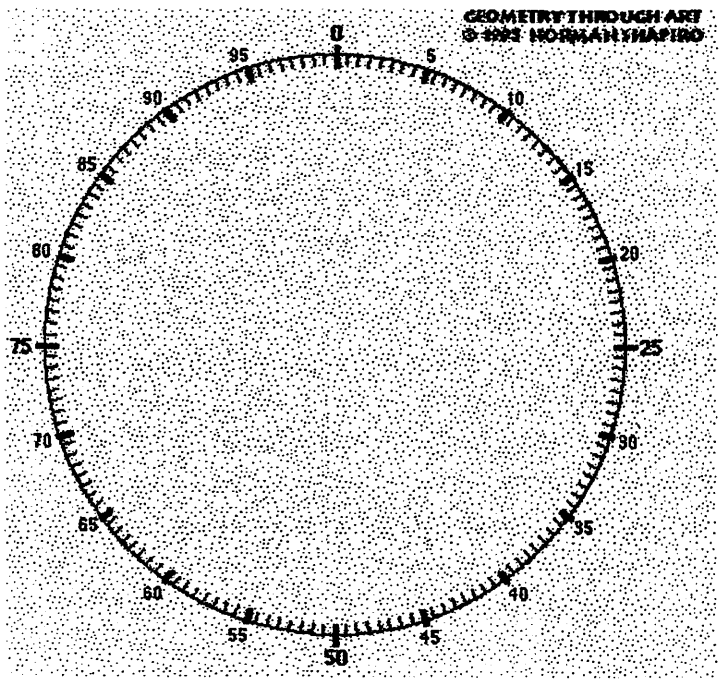
2. **Determine** What group of bears do you think left the most walrus carcasses? Explain your reasoning.

_____

_____

_____

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