Station A

1. What is the density of the cube?
2. Will the cube float or sink?
3. What is the metric unit (not the abbreviation) for density?
4. What is the other tool not here that can also be used in figuring the density?
5. What unit would be used if using that tool?

Station B

A man with blood type O marries a woman with blood type AB. Use this information to answer questions 6 -8

6. What percentage of their children could inherit their father's blood type?
7. What are the possible blood types of their children?
8. What genetic term is human blood types an example of?

The following Punnett Square shows inheritance of Red-Green Colorblindness. Use it to answer questions 9-10.

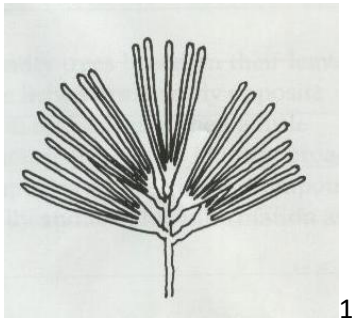
	X^B	X^b
X^B	$X^B X^B$	$X^B X^b$
Y	$X^B Y$	$X^b Y$

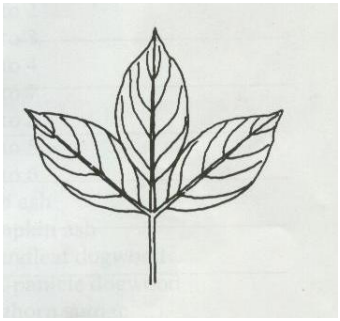
9. What percentage of the male children will be colorblind?
10. Which parent passes colorblindness to the male children?

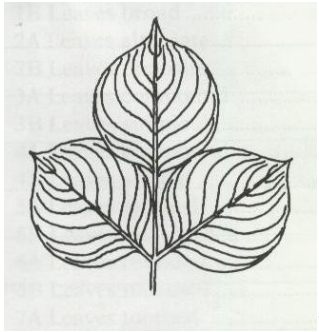
Station C

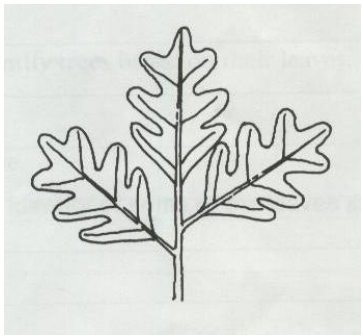
Use the key to identify the following leaves:

1A Leaves needlelike	White pine
1B Leaves broad	Go to 2
2A Leaves alternate	Go to 3
2B Leaves opposite	Go to 4
3A Leaves compound	Go to 7
3B Leaves simple	Go to 8
4A Leaves compound	Go to 5
4B Leaves simple	Go to 6
5A Leaves toothed	Blue ash
5B Leaves not toothed	Pumpkin ash
6A Leaves rounded	Roundleaf dogwood
6B Leaves narrow	Red-panicle dogwood
7A Leaves toothed	Staghorn sumac
7B Leaves not toothed	Winged sumac
8A Leaves lobed but without pointed tips	White oak
8B Leaves lobed and with pointed tips	Black oak

11. 

12. 

13. 

14. 

15. What is the type of key that you used to identify the leaves?

Station D

16. Which graduated cylinder would most accurately measure the volume of the marble?

17. What is the maximum amount accurately measured by cylinder A? cylinder B?

18. What is the minimum amount accurately measured by cylinder A? cylinder B?

19. What is the volume of the marble?

20. What is the scientific term for this type of measurement?

Use the following information to answer questions 21-25.

Serving Size	28g
Calories	150
Total Fat	9g
Saturated Fat	2.5g
Trans Fat	0g
Sodium	260 mg
Total Carbohydrate	16g
Protein	2g

21. How many calories in this food come from fat?

22. If the recommended daily allowance of total fat is 75g, what percentage of daily fat is in this food?

23. What percentage of the total fat in this food is saturated fat?

24. Which of the following would be a good choice of complex carbohydrates?

a. French fries

b. potato chips

c. whole grain bread

d. salad

25. If the recommended daily allowance of sodium is 300 mg, what percentage are you consuming if you eat a serving that contains 260 mg of sodium?

Station F

Identify the following organisms using the microscopes. Here is a list of possibilities:

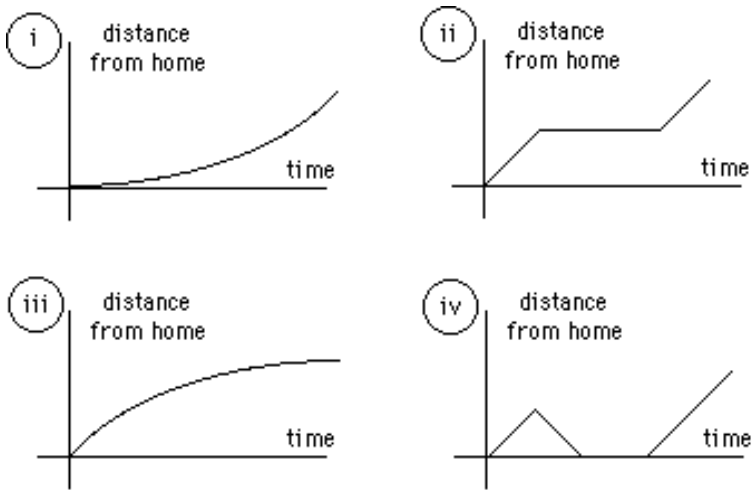
Planaria	Amoeba	Roundworm	Daphnia
Bursaria	Didinium	Yeast	Peranema
Euglena	Rotifer	Paramecium	Stentor

26. A
27. B
28. C
29. D
30. Which of these is unlike the others?

Station G

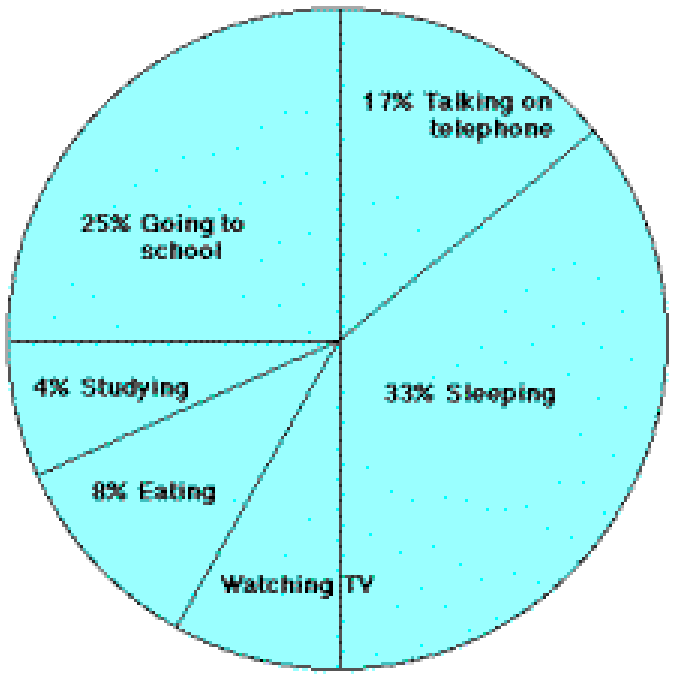
Identify the graph that matches each of the following stories:

31. I had just left home when I realized I had forgotten my books so I went back to pick them up.
32. Things went fine until I had a flat tire.



The graph below represents the typical day of a teenager. Answer these questions:

33. What percent of the day is spent watching TV?
34. How many hours are spent sleeping?
35. What two activities take up 25% of the day?



[T

Station H

Use the NWS Windchill Chart and the Heat Index Chart to answer questions 36-40.

36. What is the wind chill at zero degrees Fareignheit with a thirty MPH wind?
37. What is the heat index at 90° Fareignheit and a 70% relative humidity?
38. What is the warmest temperature that can cause frostbite with only five minutes of exposure?
39. When the relative humidity is below 50%, what is the temperature you need to start exercising extreme caution?
40. What is especially dangerous to do with a high heat index?

Station I

Here is a word bank to be used for this station. Some may be used more than once and some not at all. Only one will apply to each answer.

Independent Variable	Dependant Variable
Hypothesis	Conclusion
Control	

Use the following information for questions 41-43:

An experiment testing the growth of plants in different mediums

41. height of the plant

42. the group of plants grown in soil

43. Plants will grow better in soil than in sand.

Use the following information for questions 44-45:

An experiment testing the strength of various brands of paper towels

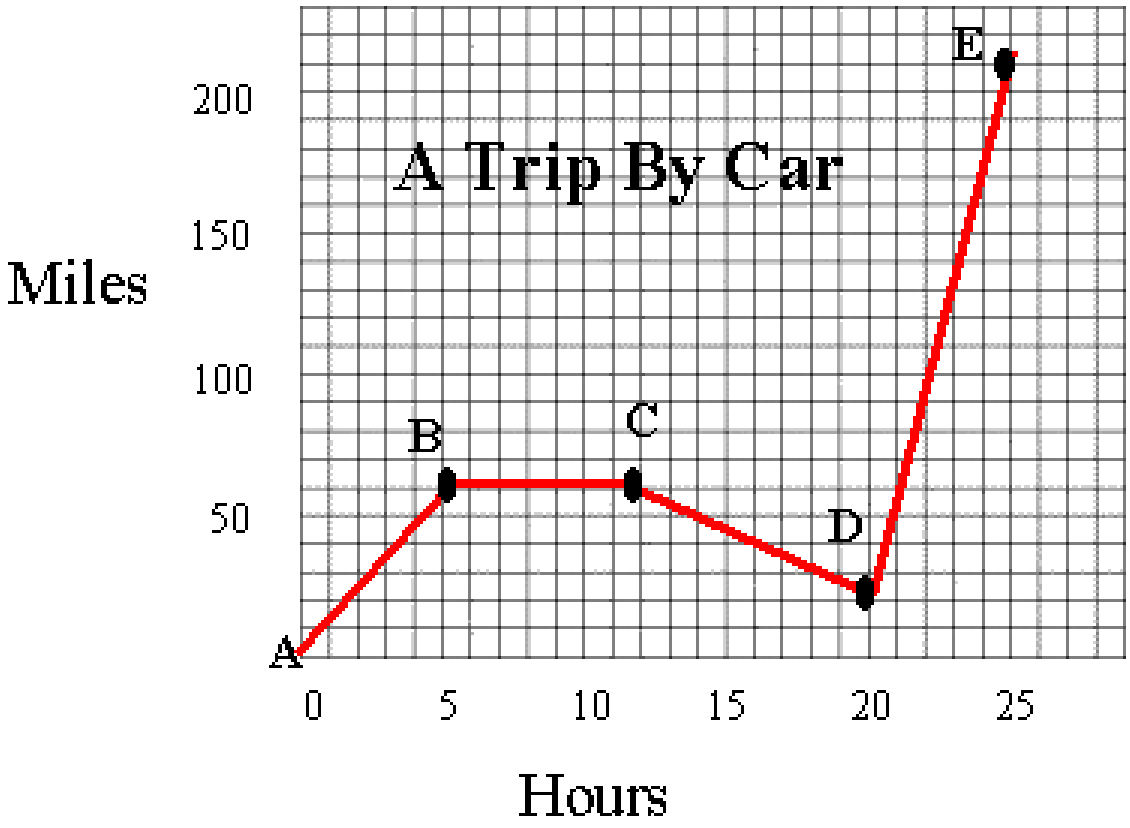
44. The different brands of paper towel

45. The amount each towel brand holds

Station J

Answer these questions about the graph below:

46. What was the average speed of the car for the trip?
47. Describe the motion of the car between hours 5 and 12?
48. What direction is represented by line CD?
49. How many miles were traveled in the first two hours of the trip?
50. Which line represents the fastest speed?



Team _____ Number:_____ Names: _____

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50. _____

Answer Key

1. 1.16 g/cm3 – 1.19 g/cm3
2. sink
3. grams over cubic centimeters
4. graduated cylinder
5. milliliters
6. 0%
7. Type A or B (AO or BO)
8. multiple alleles
9. 50%
10. mom
11. white pine
12. red-panicle dogwood
13. round leaf dogwood
14. white oak
15. dichotomous taxonomic key
16. Cylinder A
17. 50 ml, 250 ml
18. 4 ml, 15 ml
19. 5 ml
20. displacement
21. 48.2
22. 12%
23. 27.7%
24. C
25. 86.6%
26. Amoeba
27. Euglena
28. Planaria
29. Paramecium
30. Planaria (C)
31. IV
32. II
33. 13%
34. 7.9 hours
35. Eating & Talking on the phone
36. -26° F
37. 105° F
38. -10° F
39. 88° F
40. Prolonged exposure or strenuous activity
41. Dependant Variable
42. Control
43. Hypothesis
44. Independent Variable
45. Dependant Variable
46. 8.4 MPH
47. Stopped
48. Reverse or Retracing
49. 25 miles
50. DE