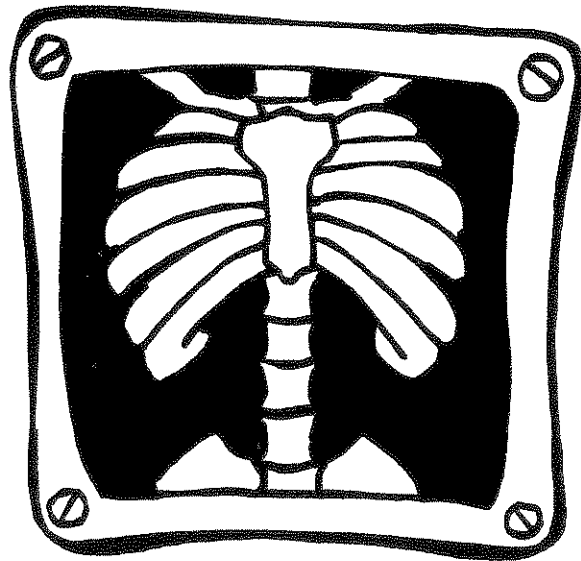
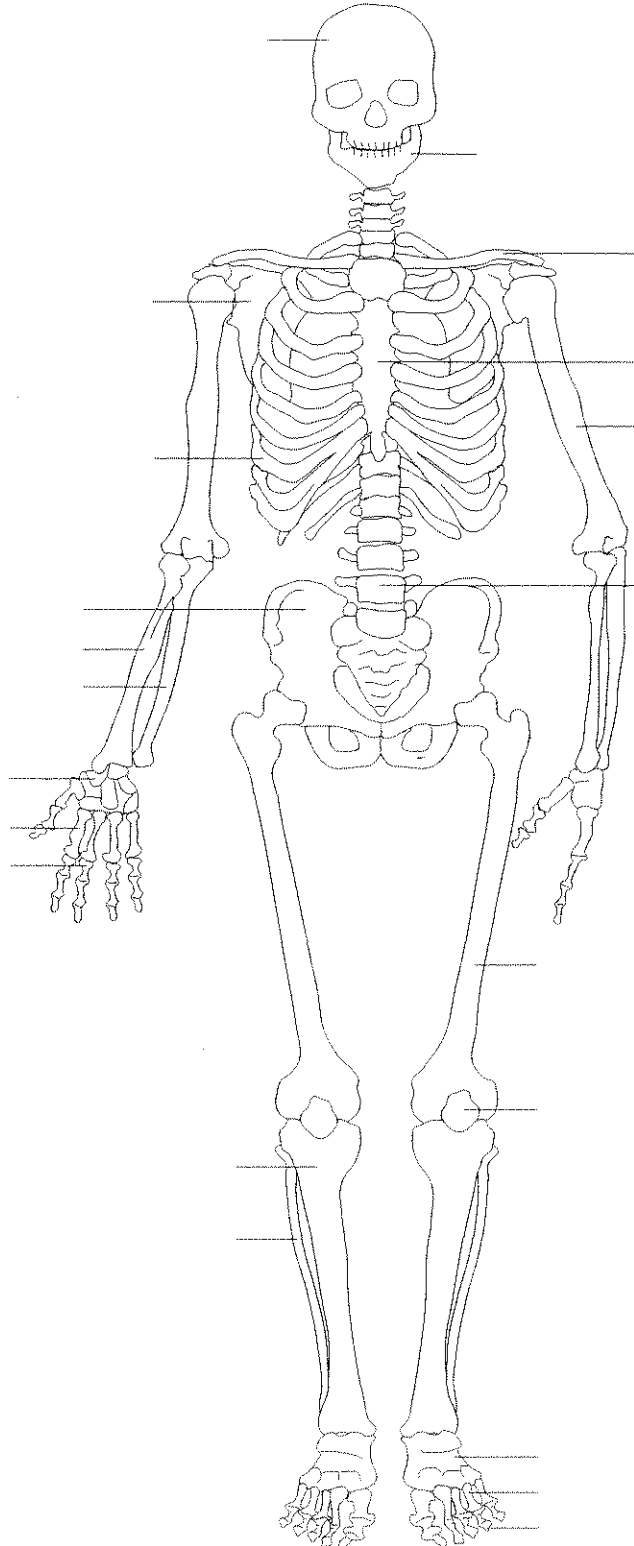


You and Your Body



Human Bones

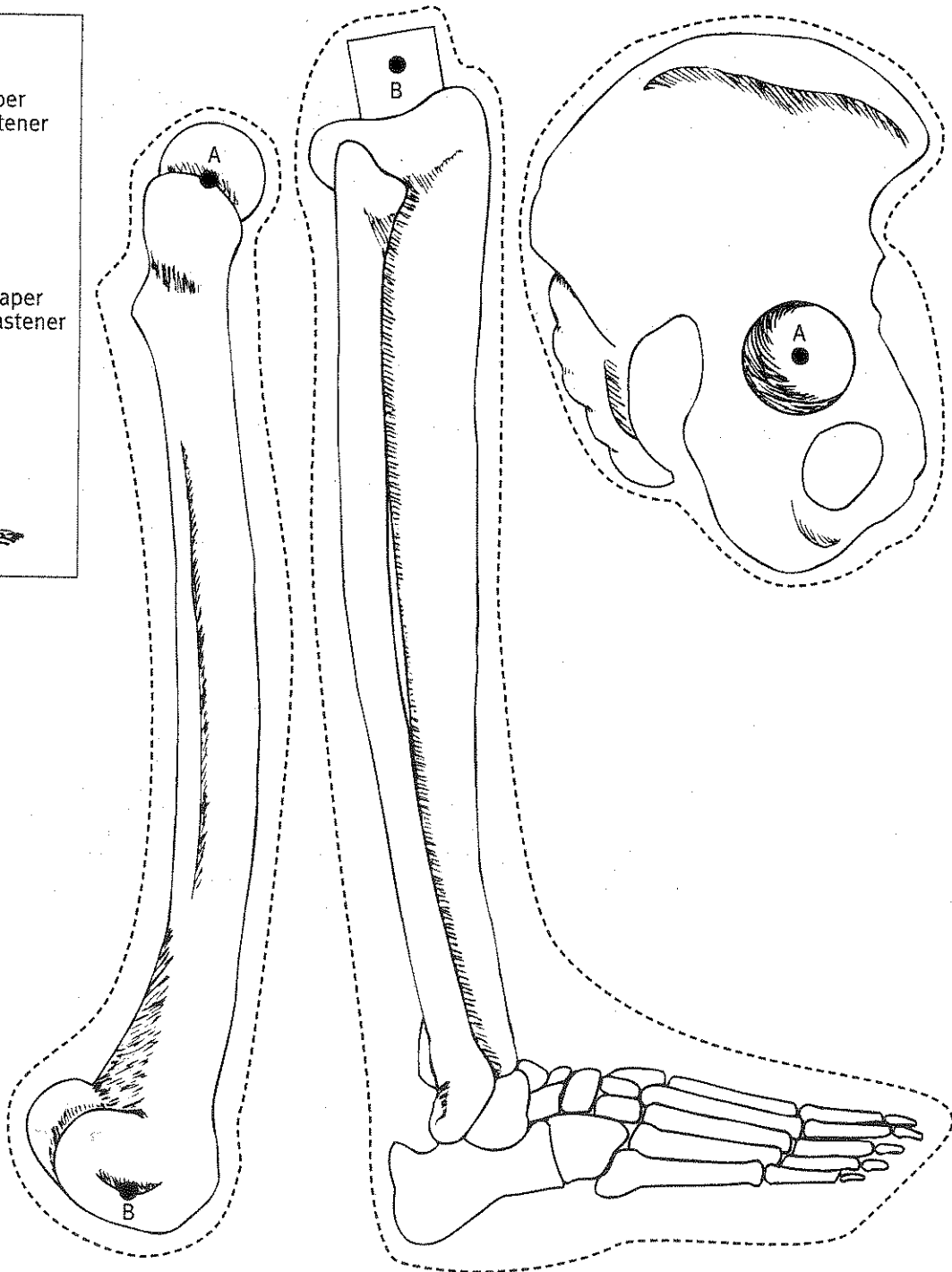
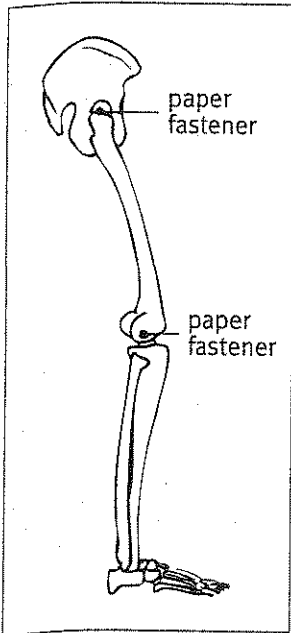
1. Label the bones of the human skeleton.



Name _____

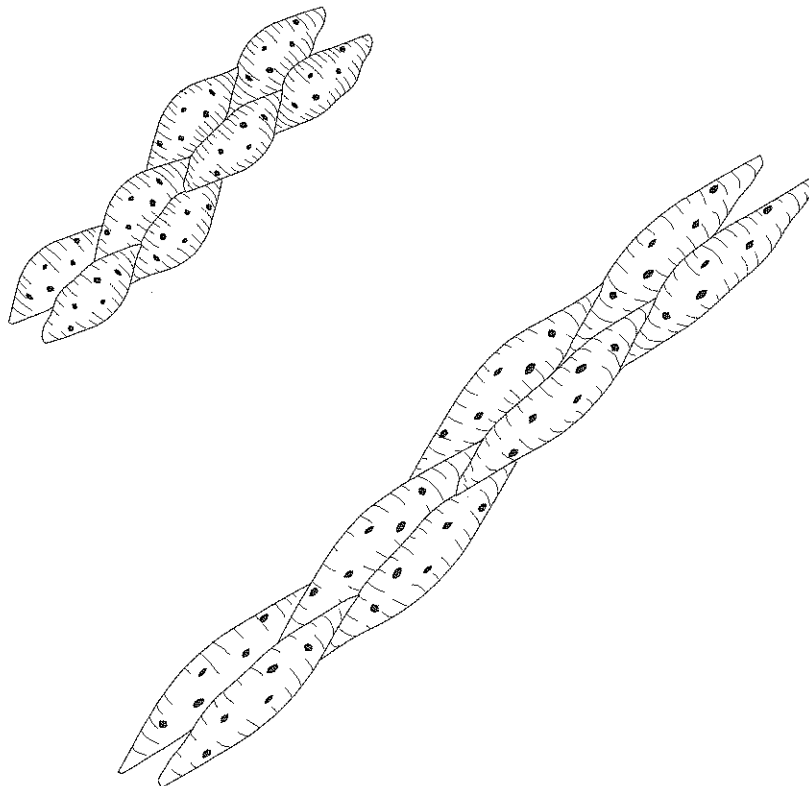
Human Bones

2. Cut out the bones. Put them together to make a model as shown in the picture.
Use your model to see how the joints move.



Muscles and Movement

1. Label the contracted and relaxed muscles.



2. Draw your model of the arm. Use the following labels: *elbow, wrist, shoulder, extensor muscle, flexor muscle, biceps, and triceps.*

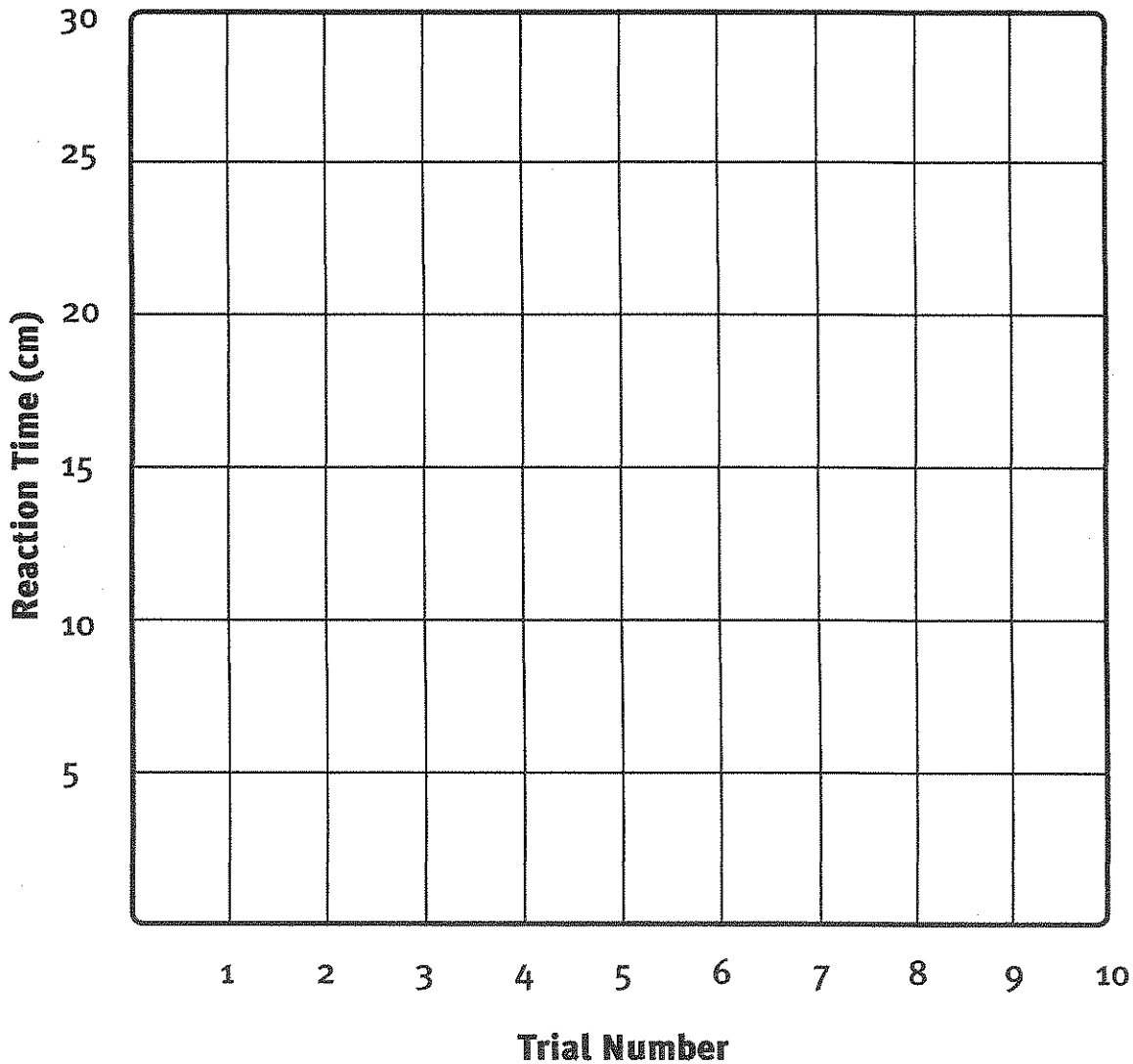
Reaction Time

Prediction

1. With practice, will reaction time improve (decrease) or worsen (increase)?

2. Results

Trial 1: _____ cm Trial 6: _____ cm
Trial 2: _____ cm Trial 7: _____ cm
Trial 3: _____ cm Trial 8: _____ cm
Trial 4: _____ cm Trial 9: _____ cm
Trial 5: _____ cm Trial 10: _____ cm



The Pumping Heart

1. Resting Pulse Rate

a. Predicted: _____

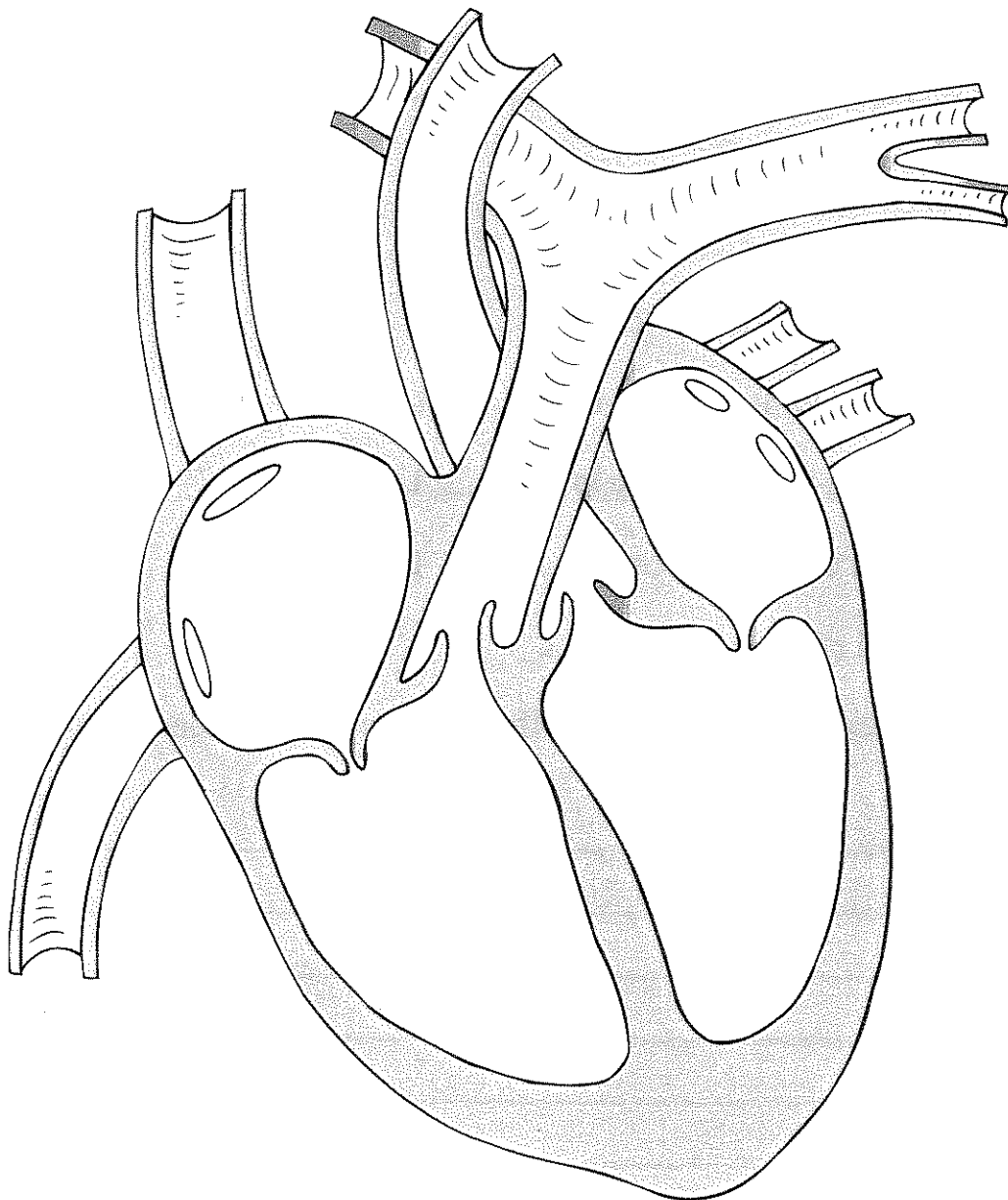
b. Actual: _____

3. Pulse Rate after Walking

a. Predicted: _____

b. Actual: _____

2. Label the four chambers of the heart.



Lung Volume and Vital Capacity

1. Prediction

a. Do you think there is a relationship between height and vital capacity?

b. What do you think the relationship is?

2. Results

a. Tester's height is _____ cm.

b. Trial 1: Tester's vital capacity is _____ L.

c. Trial 2: Tester's vital capacity is _____ L.

d. Trial 3: Tester's vital capacity is _____ L.

e. Average vital capacity: _____ L

3. Based on the **class results**, what is the relationship between height and vital capacity?

Permission granted to purchaser to photocopy for classroom use.

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Lung Volume and Vital Capacity

4. a. Breaths per 15 seconds $\times 4 =$ number of normal breaths per minute

$$\underline{\hspace{2cm}} \times 4 = \underline{\hspace{2cm}}$$

b. Breaths per minute $\times 60 =$ number of normal breaths per hour

$$\underline{\hspace{2cm}} \times 60 = \underline{\hspace{2cm}}$$

c. Breaths per hour $\times 24 =$ number of normal breaths per day

$$\underline{\hspace{2cm}} \times 24 = \underline{\hspace{2cm}}$$

5. a. Volume per 15 seconds $\times 4 =$ volume of air breathed in a minute

$$\underline{\hspace{2cm}} \times 4 = \underline{\hspace{2cm}}$$

b. Volume per minute $\times 60 =$ volume of air breathed in an hour

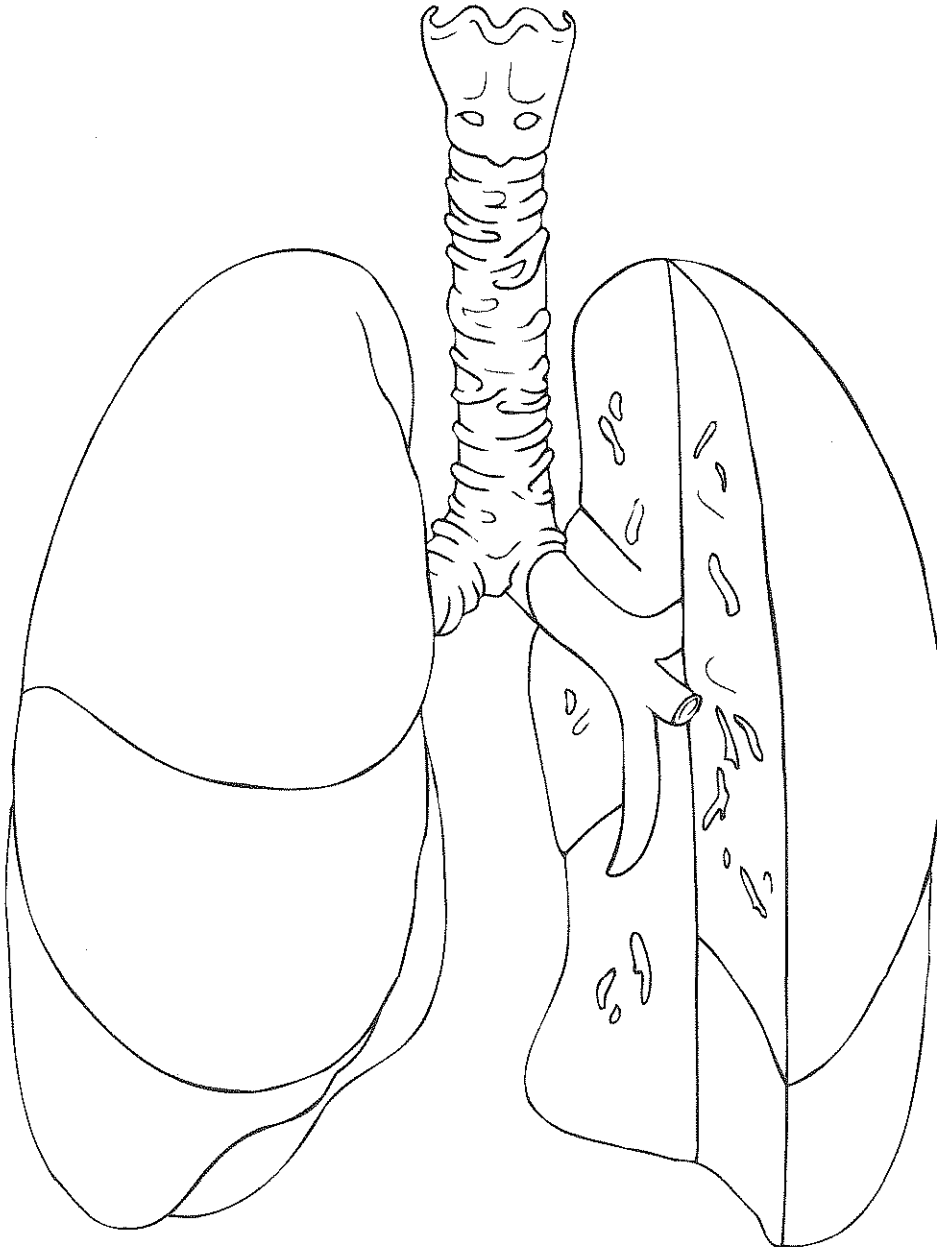
$$\underline{\hspace{2cm}} \times 60 = \underline{\hspace{2cm}}$$

c. Volume per hour $\times 24 =$ volume of air breathed in a day

$$\underline{\hspace{2cm}} \times 24 = \underline{\hspace{2cm}}$$

Lung Function

1. Label the trachea and the lungs.



2. On the back of this paper, draw your lung/diaphragm model. Label the *diaphragm*, *trachea*, and *lungs*.

Skin

1. Remove a quarter-sized piece of peel from your orange.

What do you think will happen to your orange over the next 3–5 days?

2. Record what happened to your orange over the course of 3–5 days:

3. What do you think you will feel when you blow on wet skin?

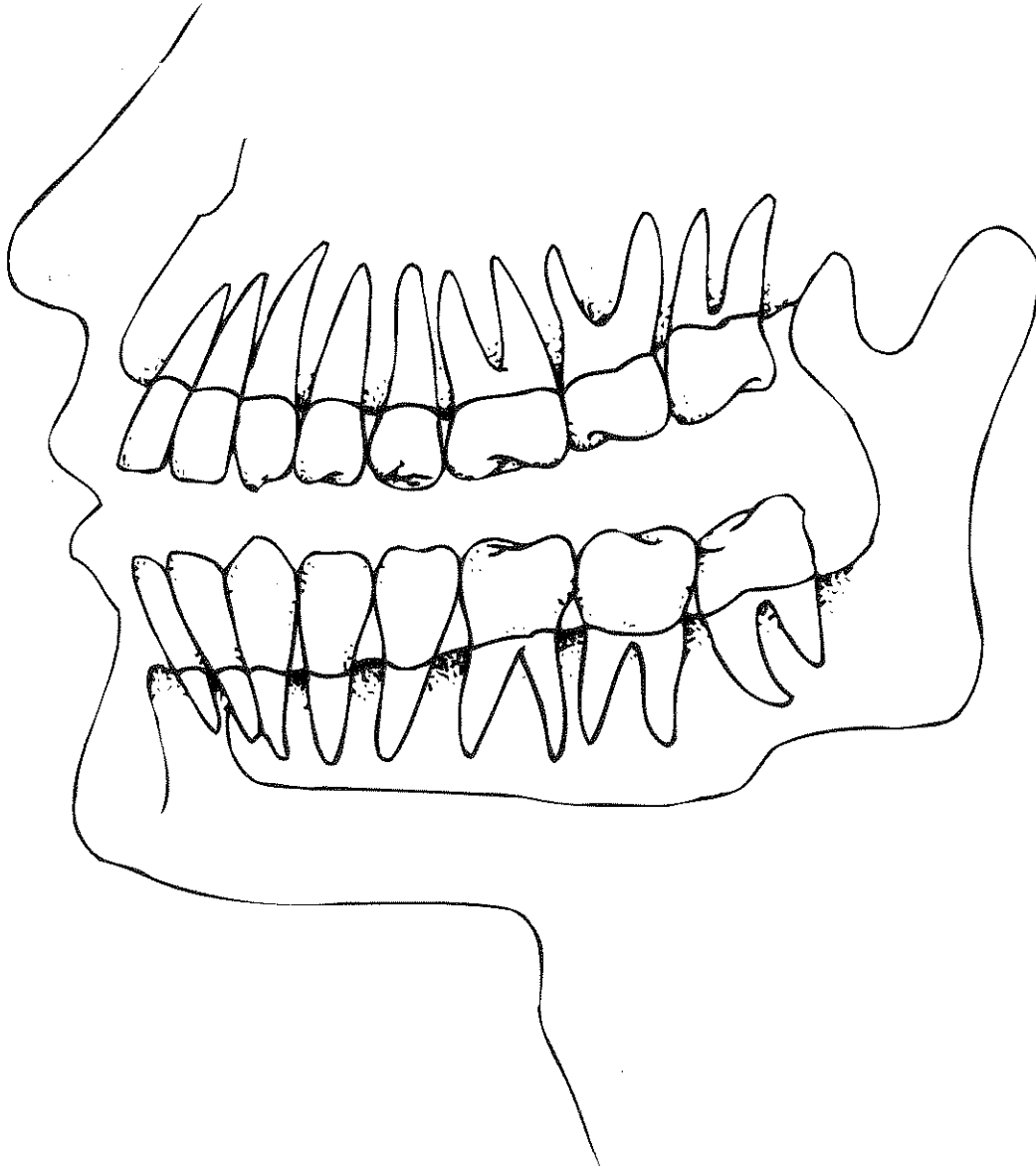
4. What do you think you will feel when you blow on dry skin?

5. Record what you felt when you blew on wet skin:

6. Record what you felt when you blew on dry skin:

Teeth

1. Label the different types of human teeth.



2. Describe the functions of the four types of teeth.

Testing for Fat

1. **Predict:** Which of the foods listed below do you think contain fat?

2.

Test Results

Food	Observation (Did the mark remain on the paper overnight?)	Conclusion (Does the food contain fat?)
a. peanut butter		
b. cottage cheese		
c. canned beans		
d. margarine/butter		
e. chips		
f. processed snack food		
g. sugary cereal		
h. fruit		
i. bread		
j. potato		
k. plain cracker		

3. Based on your test results, which foods would you say contain fat?
Which foods do not contain fat?

WARNING — This set contains chemicals that may be harmful if misused. Read cautions on individual containers carefully. Not to be used by children except under adult supervision.

(The chemical used in this activity is Biuret solution.)

Testing for Protein

1. **Predict:** Which of the foods listed below do you think contain the most protein?

2.

Test Results

Food	Observation (What color is the Biuret solution?)	Conclusion (Does the food have a high, medium, or low protein content?)
a. peanut butter		
b. cottage cheese		
c. canned beans		
d. margarine/butter		
e. chips		
f. processed snack food		
g. sugary cereal		
h. fruit		
i. bread		
j. potato		
k. plain cracker		

3. Based on your test results, which foods have the highest protein content? Which foods have the lowest?

WARNING — This set contains chemicals that may be harmful if misused. Read cautions on individual containers carefully. Not to be used by children except under adult supervision.

(The chemical used in this activity is iodine.)

Testing for Carbohydrates

1. **Predict:** Which of the foods listed below do you think contain starch?

2.

Test Results

Food	Observation (What color is the food with iodine on it?)	Conclusion (Does the food contain starch?)
a. peanut butter		
b. cottage cheese		
c. canned beans		
d. margarine/butter		
e. chips		
f. processed snack food		
g. honey		
h. sugary cereal		
i. fruit		
j. bread		
k. potato		
l. plain cracker		

3. Based on your test results, which foods contain starch?
Which foods do not contain starch?

Testing for Carbohydrates

4. **Predict:** Which of the foods listed below do you think contain the sugar glucose?

5. **Test Results**

Food	Observation (What color is the glucose test strip?)	Conclusion (Does the food have a high, medium, or low glucose content?)
a. peanut butter		
b. cottage cheese		
c. canned beans		
d. margarine/butter		
e. chips		
f. processed snack food		
g. honey		
h. sugary cereal		
i. fruit		
j. bread		
k. potato		
l. plain cracker		

6. Based on your test results, which foods have the highest glucose content? Which foods have the lowest?

Human Nutrition

Name the five food groups and list two or three examples of foods from each group:

1. _____

2. _____

3. _____

4. _____

5. _____

A Typical Food Label (Peanut Butter)

Nutrition Facts

Serving Size 2 Tbsp. (32g)

Servings Per

Container about 16

Calories 190

Fat Cal. 130

*Percent Daily Values (DV) are based on a 2,000 calorie diet.

Amount/Serving	%DV*	Amount/Serving	%DV*
Total Fat 16g	25%	Total Carb. 7g	2%
Sat Fat 3g	16%	Dietary Fiber 2g	9%
Cholest. 0mg	0%	Sugars 3g	
Sodium 130mg	5%	Protein 8mg	

Iron 4% • Riboflavin 2% • Niacin 20% • Vitamin E 10%
Not a significant source of vitamin A, vitamin C, and calcium.

MADE FROM ROASTED PEANUTS AND SUGAR.

• **LOOK FOR THE FLAVOR SEAL**

CONTAINS 2 PERCENT OR LESS OF:

MOLASSES, PARTIALLY HYDROGENATED VEGETABLE OIL (SOYBEAN), FULLY HYDROGENATED VEGETABLE

• **CONTAINS NO PRESERVATIVES**

OILS (RAPESEED AND SOYBEAN), MONO- AND DIGLYCERIDES, AND SALT.

• **NO REFRIGERATION REQUIRED**

WARNING — This set contains chemicals that may be harmful if misused. Read cautions on individual containers carefully. Not to be used by children except under adult supervision.

(The chemicals used in this activity are food extracts.)

Smell

1. Do you think you can identify the contents of the odor box by using just your sense of smell? Explain your answer.

2. Identify the smell in the odor boxes.

a. Odor Box 1 smells like _____

b. Odor Box 2 smells like _____

c. Odor Box 3 smells like _____

d. Odor Box 4 smells like _____

3. Identify what is inside the odor boxes.

a. Odor Box 1 contains _____

b. Odor Box 2 contains _____

c. Odor Box 3 contains _____

d. Odor Box 4 contains _____