



Directions: Visit the exhibits in the BodyQuest area on the second floor to find the answers to the questions. If you can answer every question you might think seriously

FIND THE SECRET WORD Each time you go to a new area, look for the meaning to the secret word. Write the letter beside each word that matches the definition. Use the words in parentheses to find the location where the word is found.

- | | |
|---|---|
| _____ Bolus (digestive system) | A. Build-up of fat and cholesterol |
| _____ Plaque (blood stream) | B. Spit and food mixed together |
| _____ Pleurae (respiratory system) | C. When the diaphragm contracts and you inhale |
| _____ Hiccup (respiratory system) | D. Fluid-filled membrane wrapped around each lung |

THE BIG CATCH Compare your hand to the giant hand. Move and bend your hand around something. How does the giant hand move? Describe one movement that your hand is able to do that the giant hand can't.

WHAT'S YOUR HEART RATE? Grasp the metal bar to find out your heart rate. Your heart rate is: _____
Exercise makes your heart beat (circle one) Faster Slower No change
What can you do that would make your heart rate **lower** than the number above?

CHOW DOWN Each colored ball that is thrown in to the mouth represents a type of food choice. Circle the color of ball you would want to throw in the mouth more than others if you wanted to make healthy choices every day.
Green Blue Yellow Orange Purple

GET UP Try to jump as high as you can against the board. Record your score here: _____
Name two locations on your body where muscles helped you to jump.

1 _____
2 _____

LOCKER ROOM Why is the spine made of many smaller bones rather than one long bone like in your leg?

Look at the different types of joints in your body. Circle the joint that allows the most movement. Underline the joint that allows the least movement.

- Ball & Socket Hinge Gliding Saddle Pivot

BLOOD STREAM - TRUE OR FALSE Look at the sign on the wall to find the answers.

- | | | |
|---|---|---|
| T | F | White blood cells protect us from disease. |
| T | F | Plaque is good to have in your arteries because it slows the flow of blood. |
| T | F | Platelets plug leaks and help blood clot. |
| T | F | Oxygen is a waste product and is carried away by the red blood cells. |

BODYQUEST CHALLENGE ANSWER KEY

Teachers: Some questions have definite answers and some are more open-ended. We have provided a few possibilities for the open-ended questions but creative students might find others!

QUESTION/EXHIBIT	ANSWER
FIND THE SECRET WORD bolus	B. Spit and food mixed together
plaque	A. Build-up of fat and cholesterol
pleurae	D. Fluid-filled membrane wrapped around each lung
hiccup	C. When the diaphragm contracts and you inhale
THE BIG CATCH Describe one movement that your hand is able to do that the giant hand can't.	The giant hand can't close around something, the thumb does not have the same amount of movement as a real hand, and there are more ways to bend a real hand.
WHAT'S YOUR HEART RATE? Exercise makes your heart beat Faster? Slower?	FASTER , exercise makes your heart work harder thus increasing the heart rate.
What can you do that would make your heart rate lower than the number above?	Relaxing your body, breathing slowly, meditation, medication, sleep, resting
CHOW DOWN Circle the color of ball you would want to throw in the mouth more than others if you wanted to make healthy choices.	GREEN – fruits and vegetables, you need lots of these
GET UP Name two locations on your body where muscles helped you to jump.	Leg, thigh, foot, arm, hand, back, and torso. Lots of possibilities because when you jump up, your whole body is in action and many muscles are used from the neck to the toes.
LOCKER ROOM Why is the spine made of smaller bones rather than one long bone like in your leg?	For flexibility, to help you bend over, long bones are not as flexible.
Circle the joint that has the most movement. Underline the joint that has the least movement.	BALL AND SOCKET (circled), located in hips and shoulders <u>HINGE</u> (underlined), located in knees and elbows, move in one direction
BLOOD STREAM - TRUE OR FALSE T F White blood cells protect us from disease.	TRUE
T F Plaque is good to have in your arteries because it slows the flow of blood.	FALSE A build-up of plaque may slow the flow of blood, block arteries, contribute to a heart attack, higher blood pressure and other health issues.
T F Platelets plug leaks and help blood clot.	TRUE
T F Oxygen is a waste product and is carried away by the red blood cells.	FALSE Carbon dioxide is a waste product carried away the red blood cells.