



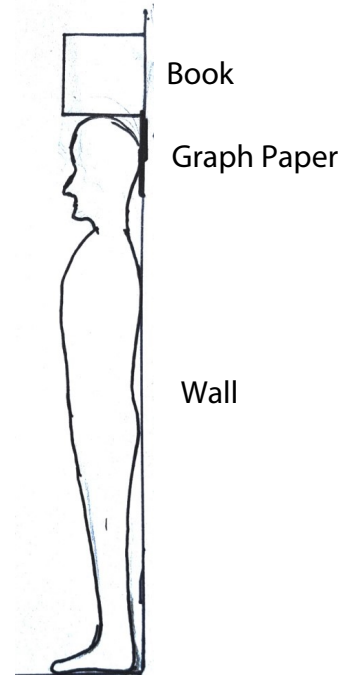
Name: _____

Strength and Flexibility

Activity - Are We Always the Same Height?

Instructions:

- a. Tape a sheet of graph paper on the wall at your head height.
- b. Highlight a vertical line on the middle of the paper.
- c. Find a book and set it near your experiment.
- d. Find a helper who will help you in the morning.
- e. Have a book (or square) handy along with a pencil.
- f. In the morning, after a good nights sleep, before getting out of bed, summon your helper. Have the helper get the book (or square) and a pencil ready.
- g. Immediately get out of bed and stand with your back to the wall as seen in the diagram. Have your helper line the book up with the spine of the book along the vertical line and the bottom of the book on the top of your head.
- h. Have your helper mark your height and label with the time.
- i. Resume again and take another measurement in 2 minutes, 4 minutes, 6 minutes, 10 minutes, 20 minutes, 30 minutes and 60 minutes. Between measurements remain standing or walking. Do not sit or lay back down.
- k. In between measurements, measure the height up to the line and document your height into your Science Notebook.



Things to watch for:

1. Keep your posture the same for each measurement.
2. Place the book the same way against the top of your head and against the wall each time.



Student Worksheet

Name: _____

Activity - Are We Always the Same Height?

Answer the following questions:

What was your height: Immediately after getting out of bed? _____ inches

After 2 minutes? _____ inches

After 4 minutes? _____ inches

After 6 minutes? _____ inches

After 10 minutes? _____ inches

After 20 minutes? _____ inches

After 30 minutes? _____ inches

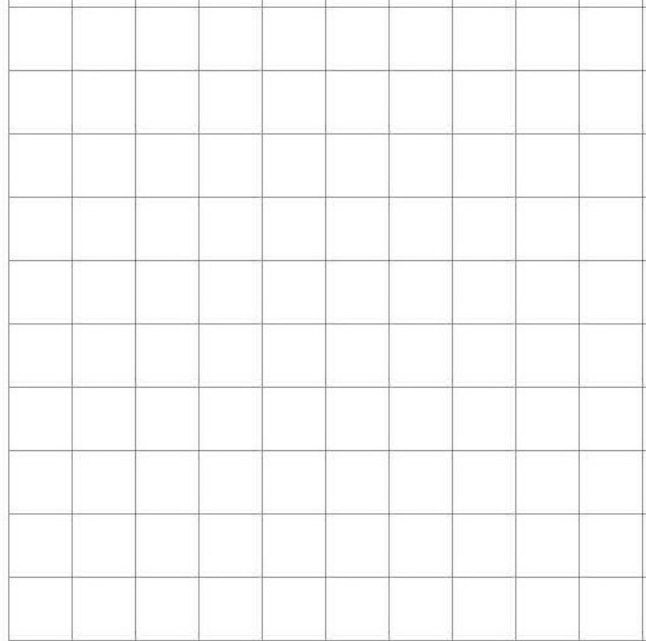


Student Worksheet

Name: _____

Activity - Are We Always the Same Height?

Graph height vs time below:



What is your true height? _____ inches

Do you think your height varies throughout the day? _____

Does your height vary with the type of activity you do? _____

What is your average height? _____ inches

What is your range of heights? _____ inches to _____ inches

What happens to the Shane's height while in free fall on the ISS?

Is it the same as what happened to you, or different? _____

How does the Shane's height in free fall compare to his height on Earth?

Why is Shane's height different on the ISS compared to on the ground?
