This is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ passage which has \_\_\_\_\_\_\_\_\_\_ questions.

If someone had never taken the ACT before, what would you advise them to do on this section?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12. Which experiment should you use to answer #12? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is shown on the y axis of this graph? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is shown on the x axis of this graph? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

At what temperature did all three lines have the same value for their rise? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Therefore, the best answer to #12 is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

13. Which experiment should be used to answer #13? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

According to the scientists in #13, as the temperature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, the volume will also \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

In Figure 3, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is on the y axis and \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is on the x axis.

As the temperature went up from 20 C to 100 C, the volume in the container went \_\_\_\_\_\_\_\_\_\_\_\_ from 20 mL to \_\_\_\_\_\_\_\_\_\_\_\_ mL

The line in Figure 3 represents what gases? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the best answer to #13? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

14. Which experiment should be used to answer #14? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The engineer wants a material that does or does not stretch? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

According to Figure 1, which material stretched the most (linear expansion is stretching)? \_\_\_\_\_\_\_\_\_\_

According to Figure 1, which material stretched the least? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the best answer to #14? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

15. Which experiment should be used to answer #15? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

According to Figure 3, as the temperature goes us, the volume goes \_\_\_\_\_\_\_\_\_\_\_\_\_.

If a balloon is placed on the surface of a hot bath, its temperature is going to go \_\_\_\_\_\_\_\_\_\_, therefore its volume would also \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

The best answer to #15 is \_\_\_\_\_\_\_\_\_\_\_\_\_.

16. Which experiment should be used to answer #16? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What temperature does #16 say the wire is at? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the linear expansion of the copper wire at this temperature? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the linear expansion of aluminum at this temperature? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the linear expansion of brass at this temperature? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the linear expansion of iron at this temperature? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the linear expansion of nickel at this temperature? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

List the metals in order from longest to shortest \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Carefully read #16. The best answer is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

17. Which experiment should be used to answer #17? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

In the apparatus, a weight is connected to a simple machine called a \_\_\_\_\_\_\_\_\_\_\_\_\_ and used to stretch a wire. If heavier weight were used, would the wire stretch more or less? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Look at the original graph in Experiment 1, which choice can you eliminate based on this original weight? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Think carefully about #17. The best answer is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.