

**Experimental Design- Explore**

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

**Carefully read the paragraph below. Answer the following questions in complete sentences.**

During gym class Sally noticed that her friend Melissa always ran faster than her. Sally knew that they exercised equally, so she wondered what could cause Melissa to run so fast. Sally began to compare herself and Melissa to see what could cause the difference in speeds. She noticed that Melissa was taller and wondered if height affected speed. Sally predicted that taller people were able to run faster, but wanted to check her prediction. She asked her gym teacher if she could test her idea because the class was all girls and she thought this would help her get accurate results. Sally measured all of her classmates' height in centimeters and recorded it in her chart. Each classmate then ran one mile while Sally timed them with a stopwatch and recorded the data in seconds. She then began to review her data and look for the answer to her question.

1. What question is Sally trying to answer?

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2. What made her want to answer this question?

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3. What is being measured or observed in this experiment?

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4. Are the observations recorded in words or numbers?

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5. What factor does Sally think might cause the measurement to change?

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6. What parts of the experiment were kept the same throughout?

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7. Is there a standard of comparison in this experiment (something she compared everyone to)?

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8. How many times was the experiment completed?

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