

## COMPONENTS OF OUR EXPERIMENT

To assist in planning for your experiment worksheet, fill out this paper, indicating ideas for each section.

Purpose: The purpose of the experiment will be to determine the most efficient way to slay a dragon.

Hypothesis: I think that the use of a sharp weapon will slay a dragon more quickly than the use of blunt weapons, airborne weapons, or flaming weapons.

Equipment: A dozen dragons, a variety of medieval weapons, a stop watch, flame proof safety gear, 2 dozen knights (note, may need extra).

Procedure: 1. Place a dragon and a knight inside a large arena. 2. Provide the knight with a weapon. 3. Provide a countdown, start a timer, at which point the knight will attempt to slay the dragon with the provided weapon. 4. If the knight is "no longer to participate in the experiment" switch in a new knight. 5. When the dragon has been slain stop the timer. 6. Repeat with the remaining weapons.

Safety Precautions: Dragons may breath fire, knights are to wear fire proof armor and tie back long hair. Note, many of the weapons have sharp edges, be cautious while handling them. when dipping arrows in fire be sure to stay behind the indicated safety line.

Independent Variable: The weapon used to slay the dragon.

Dependent Variable: The length of time taken to slay the dragon.

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Constant Conditions: The type of dragon. Terrain on which the battle is to take place.

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Control: Have a knight (series of knights) attempt to slay a dragon with their bare hands.

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Note: you may need extra knights for this part of the experiment.

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Observations: When the dragon was hit with the mace he made a very loud angry roar. The dragon seemed distracted by the smell of burning knights. The scales of the dragon were very hard, making them difficult to pierce.

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Data: A table will be made indicating the weapon used and the time taken to slay the dragon. Time will be recorded in hours and minutes.

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Discussion: The results show that flaming weapons had very little affect on the dragons. I think that this is because dragons are used to fire. Based on the dragon's ability to fly, the knights had a difficult time with hand held weapons.

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Sources of Error: Depending on the time of day, the knights had trouble seeing. Some of the dragons were older, meaning they had more difficulty moving quickly. Some of the knights were hesitant to charge a dragon in a one-on-one battle, this will affect their timing.

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Conclusion: Based on the results, my hypothesis was not proven, the flying weapons were able to slay a dragon more quickly. I think this is because it allowed the knights to continue their assault while the dragon was airborne.

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