

## Experiment 9.1 - The Importance of Direction

Wendy

1.23.23

$$\text{Speed} = \frac{\text{distance traveled}}{\text{time traveled}} \quad S = \frac{d}{t}$$

Velocity = speed + direction

Hypothesis: I think that the results of speed will be different from the result of velocity

Observations: <sup>①</sup> In the first part of the experiment the speed of the eggs was the same and the direction of the eggs was the same, because of this neither of the eggs was damaged. <sup>②</sup> When one egg was moving and the other egg was stationary, the egg that was moving was undamaged but the egg that was stationary was damaged. <sup>③</sup> In part three the two eggs, their speed was the same but their direction was different.

speed  
and direction  
where  
different in  
part a

Conclusion: speed and direction matter a lot and they are velocity. When two objects are traveling in the same speed and the same direction, they have the same velocity.