S U M M A R I E S

INVESTIGATION 1: Temporal Sequence

In Investigation One, you did steps in a specific sequence. During this Investigation, you:

1. first added water to a beaker, second added vegetable oil and stirred, then third added more water and stirred.
2. first added cherry powder to a beaker, second added water and stirred, and third added vegetable oil and stirred.
3. first added cherry powder to a beaker, second added vegetable oil and stirred, and third added water and stirred.
4. first added cherry powder to beaker and stirred two times, second added vegetable oil, and third added water.
5. made predictions in the lab.
6. made and recorded observations in the lab.

Through these experiments, you concluded that:

1. water and vegetable oil do not mix together.
2. vegetable oil forms a layer on top of water.
3. cherry powder and water do mix together.
4. cherry powder and vegetable oil do not mix together.
5. the sequence of an experiment can may or may not change its results.
6. it is important to tell others the sequence you used to do an experiment.

S U M M A R I E S

INVESTIGATION 2: Passage of Time

In Investigation Two, you observed change over time. During this Investigation, you:

1. observed an ice cube under a lamp over time.
2. observed an ice cube not under a lamp over time.
3. dropped food coloring in hot water and observed it over time.
4. dropped food coloring in cold water and observed it over time.
5. added baking soda to vinegar and made observations over time.
6. add chalk to vinegar and made observations over time.
7. use an egg timer and an hourglass timer to measure time in the lab.

Through these experiments, you concluded that:

1. it takes a shorter time for an ice cube under a lamp to melt than an ice cube not under an lamp.
2. it takes a longer time for food coloring to spread in cold water than in hot water.
3. the bubbling of baking soda in vinegar occurs over a shorter time than the bubbling of chalk in vinegar.
4. changes take different amounts of time to occur.

S U M M A R I E S

INVESTIGATION 3: Exploring Rate

In Investigation Three, you used a swing model to explore rate. During this Investigation, you:

1. used a pan balance to compare the weight of a steel marble and metal cube.
2. sat the steel marble on a swing model and counted how many times it swung in 10 seconds.
3. sat the metal cube on a swing model and counted how many times it swung in 10 seconds.
4. shortened the swing model.
5. sat the steel marble on a short swing model and counted how many times it swung in 10 seconds.
6. sat the metal cube on a short swing model and counted how many times it swung in 10 seconds.

Through these experiments, you concluded that:

1. the steel marble was lighter than the metal cube.
2. the swing swung the same number of times when the steel marble and metal cube were on it.
3. the swing swung faster when it was shorter.
4. the swing swung slower when it was longer.
5. the length of the swing changes it swinging rate.
6. the weight on the swing does NOT change its swinging rate.