

Ideas for SEAMS investigations:

- How does wetting paper affect its strength?
- Does the type of paper towel affect how much water it can absorb?
- How does the thickness of paper affect its strength?
- How can you fold paper to make it support more weight?
- How does temperature affect the rate of evaporation?
- Do additives affect the rate at which water evaporates?
- Does the viscosity (thickness) of a liquid affect its evaporation rate?
- Does the size of a sponge affect the amount of water absorbed?
- Does the material from which a sponge is made affect the amount of water absorbed?
- Is the amount absorbed by a sponge affected by the type of liquid being absorbed?
- Does the temperature of the water affect the dissolving rate of a sugar cube?
- Does the kind of container affect how long a drink stays cold/hot?
- How does _____ (size, shape, additives) of ice affect its melting rate?
- Do additives affect the time required for water to freeze?
- What materials are the best insulators for ice?
- Does water temperature affect the amount of sugar that can be dissolved in a given amount of water?
- Does the shape of a piece of candy affect the rate at which it melts?
- Does the size of a piece of candy affect the rate at which it melts?
- How does the pitch of a bottle change when the amount of water in the bottle is changed?
- How does the temperature of bubble solution affect the amount of bubbles produced?
- How does the size of the bubble wand affect the time bubbles take to pop?
- How does the drop-height of a ball affect the height of its bounce?
- How does the drop-height of a ball affect the number of times it will bounce?
- How is the bounce of a ball affected by the surface on which it bounces?
- How does the material from which a ball is made affect its bounce?
- How does the distance from a light change the size of an object's shadow?
- Does the speed of an object rolling down a ramp change with the angle of the ramp?
- Does the speed of an object rolling down a ramp change with the mass of the object?
- Does the material from which an object is made affect the speed at which it rolls?
- Does the type of surface affect the distance something rolls?
- Does the temperature of water affect how long it takes Alka-Seltzer to dissolve?
- How does the kind of liquid affect how long it takes Alka-Seltzer to dissolve?
- How does temperature affect the rate at which a banana ripens?

- Does the size of a fruit affect the number of seeds it contains?
- Does the size of a fruit affect the amount of juice it contains?
- How does thickness affect the strength of rubber bands?
- Does the method of popping affect the volume of popcorn produced?
- Does popping time affect the ratio of popped to unpopped kernels?
- Does the storage temperature of popcorn affect the amount that pops?
- How does temperature affect the strength of plastic garbage bags?
- How do different types of liquids affect the strength of paper grocery bags?
- Does the kind of surface (concrete, asphalt, grass, dirt, or water) affect the temperature near ground level?
- How does temperature affect the drying time of paint?
- How does adding coils of wire to an electromagnet affect its strength?
- How does the force between a piece of metal and a magnet vary with distance?
- How does material between magnets affect their ability to attract?
- How does the position in which a seed is planted affect the way it sprouts?
- How does the depth a seed is planted affect its sprouting time?
- How does the size of a seed affect its sprouting time?
- What is the effect of the temperature of the soil on sprouting time?
- What is the effect of different kinds of soil on the height of plants?
- What is the effect of different kinds of water on the height of plants?
- How does boiling an egg affect its mass?
- How does moisture affect the strength of a tissue?
- What is the effect of temperature on the viscosity of oil?
- What is the effect of sunlight on fabric?
- Does the color of hair affect its reaction to humidity?
- What is the effect of humidity on the drying time of paint?
- How does the spacing of dominoes affect the rate at which they fall?
- How does exercise affect body temperature?
- How does exercise affect heart rate?
- What is the effect of eye color on reaction time?
- Does air temperature affect the growth rate of a plant?
- Does the amount of fertilizer affect the germination rate of _____ seeds?
- Does the length/width of a vegetable/fruit affect the number of seeds that are inside?
- Does temperature/type of surface affect the movement of a mealworm/superworm?

- Does breaking apart or changing the shape of a whole object affect the overall sum of its mass?
- Does the length/width of a rubber band on a ____ affect its pitch?
- Does the amount of water moving in a stream affect how far it can move rocks?
- Does the height of a ramp affect the distance a _____ will travel?
- Does the type of food affect the variety of minerals consumed?
- Does the apparent movement of the Sun predict the movement of shadows we observe on Earth?
- Does shaking an object in liquid affect the mass of that object?
- How is limestone able to retain water?