St. Charles Parish LIBRARY **PROGRAM TO GO**

STEM Safari: Blubber Experiment

Join us on Facebook **Thursday, June 17 at 10:00 am**

St Charles Parish Library

Materials Included

- Half Stick of Butter in Ziploc bag
- 1 Empty Ziploc bag

What You Need at Home

- 2 Small Bowls or Tupperware
- Ice
- Water

Missing something?

We may be able to help.
Call your nearest branch for details.

Video Tutorial: www.myscpl.org /ProgramsToGo

Instructions

1. Fill your 2-small bowls with water and ice cubes. These will be your “Arctic oceans.”
2. Unwrap the half stick of butter, place it back into the bag, and make sure it is sealed.
3. Use your sealed Ziploc bag with the butter in it to wrap around the index finger of one hand. *(**Hint**: If the butter is too soft, place it in the refrigerator for about 15 minutes to let it firm up a bit so it will be easier to mold around your finger.)* This acts like an arctic animal’s blubber.
4. Take out the additional EMPTY Ziploc bag and wrap it around the index finger of your other hand. This bag is like the animal’s skin without the blubber insulation.
5. Place your butter bag coated finger into one bowl and the empty Ziploc covered finger into the other bowl.
6. What do you notice? Is one of your fingers warmer in the ice water than the other? Which one? How does blubber keep animals warmer in cooler temperatures?

Want More? Visit our website at www.myscpl.org

St. Charles Parish LIBRARY **PROGRAM TO GO**

STEM Safari: Penguin Slide Experiment

Join us on Facebook **Thursday, June 17 at 10:00 am**

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Materials Included

- 2 Penguin Cut-outs
- Aluminum Sheet Pan

What You Need at Home

- Textures to pour onto the surface (ex: salt, flour, sand)
- Tape or glue

Missing something?

We may be able to help.
Call your nearest branch for details.

Video Tutorial: www.myscpl.org /ProgramsToGo

Instructions

1. Using some ice cubes, tape or glue your penguin picture to the cube to create your "penguin".
2. Set up a slightly sloped surface by propping one end of the aluminum sheet pan onto a slightly higher surface.
3. Using no additional textures, hold the penguin at the top of the slope and let go. How fast did it slide? Did it make it to the end of the cookie sheet?
4. Now add some texture to the cookie sheet (ex: salt, sugar, sand, etc.) and make predictions on what will happen when you let the "penguin" slide on this surface.
5. Repeat the penguin sliding process using the added texture.
6. How did the friction build up or slow down your penguin using this additional texture?
7. Try varying textures to see how they affect your penguin's slide differently!

Want More? Visit our website at www.myscpl.org

St. Charles Parish LIBRARY **PROGRAM TO GO**

STEM Safari: Webbed Foot Experiment

Join us on Facebook **Thursday, June 17 at 10:00 am**

St Charles Parish Library

Materials Included

- 2 Ziploc Bags
- Socks

What You Need at Home

- Container of water. (Try it with a kiddie pool or bathtub)

Missing something?

We may be able to help.
Call your nearest branch for details.

Video Tutorial: www.myscpl.org /ProgramsToGo

Instructions

1. Fill up a container with water.
2. Spreading your fingers apart, place your hand inside the water and move it back and forth. Notice the movement of the water. Is there any resistance?
3. Place your hand(s) inside a Ziploc bag. Place the Ziploc bag covered hand(s) inside an orange sock(s) to create the webbed foot/feet.
4. Quickly move your hand(s) back and forth in the water to see how the movement of the water and the resistance has changed.
5. Why do you think it's important for ducks to have webbed feet?
   (Answer: it helps them to be more quick and efficient swimmers.)

Want More? Visit our website at www.myscpl.org

Interested in more STEM-based activities to do at home?

- Check out the various experiment ideas that are offered through our website.
- https://www.myscpl.org/research (Select "Students K-12," choose the appropriate grade level, and explore through our SCIENCEFLIX database!)