It is hard to believe that Science and Technology Week is coming to an end once again this year. I know many of you have participated and learned some amazing things about science. As we close the week, Praxis will be holding their annual Family Science Olympics. This tradition has been taking place for over 20 years and just continues to get better and better! We will have activities for scientists of ALL ages to take part in. This is your chance to get involved and participate in some incredible hands on science activities. If you complete the activity, you get the chance to win some amazing science prizes and there is also the chance to win an iPad mini! Just in case you cannot make it down to the Taylor Science Centre at Medicine Hat High School today between 10:00 a.m. and 3:00 p.m., I thought I would share one of our activities with all of you. This one is called "Why are those Gobs Stopping?" I hope to see you there!

Remember to always ask an adult before doing any science experiment.

Materials

- "Gobstoppers" or "Jawbreakers" of different colours
- Shallow dish
- Room temperature water

Procedure

1. Pick 4 Gobstoppers of different colours
2. Arrange the Gobstoppers, equidistant from each other, in the dish.
3. Pour enough room temperature water into the dish to cover the bottom of the Gobstoppers.
4. Now it's time for everyone's favorite part of science… waiting.
5. Do the colours dissolve in the water?

6. After about 3 or 4 minutes, what do you notice?
7. Make a guess (hypothesize) as to why this might be happening.
8. Wait longer to see what else happens.

What is going on?

Since the colours of the Gobstopper run when soaking in the water, you very quickly observe that the candy coating of a Gobstopper is water-soluble. This means that the candy molecules are capable of mixing with water molecules. The surprise here is that the Gobstopper colours don't mix within the plate as they dissolve. Instead, the colours run into each other and stop, initially forming perfect, colorful wedges.

The secret here is that each colour is coated with a thin layer of wax. The wax isn't water soluble, but comes off first and prevents any colour mixing from taking place for a period of time. Also, since we're using the famous Gobstopper candy, you will notice each candy change colour as it dissolves. That's because Gobstoppers have different colourful layers as you get closer to their centre. Science with candy sure is cool!

This experiment was modified from information obtained from Steve Spangler Science.

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