Lab Sheet: Hot and Cold

Materials needed	• balloons • two empty two litre pop bottles • two big bowls or other containers to hold water • hot water • cold water • ice cubes (optional)
Hypothesis What do you think will happen?	
Procedure	1. Place a balloon over the mouth of a two litre pop bottle. Do this again with another balloon and another two litre pop bottle. 2. Fill one of your bowls (or other containers) half full of cold water. Fill the other bowl with hot water. Be sure that you are following the safety procedures around the hot water. 3. Put one bottle in the bowl with cold water or ice water, and the other in a container with hot water. What do you observe? 4. Place the first bottle from the cold water into the hot water, and the bottle from the hot water into the cold water. What do you observe?

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Obervations *Remember observations can be recorded with pictures, numbers and/or words!	What happens to the balloons? Do they shrink of inflate? Why do you think this is?
Conclusions	

Follow-up questions

What happens to particles when they are heated? Cooled?

How does the particle theory of matter explain the particle's behaviours at different temperatures?