

Connected Learning Week 1 Science Activities

	Chemical Change	Tasks	Resources
Year 1	Scavenger Hunt	<p>Students are to discover different material elements: strong, bendy, waterproof, stretchy, soft, smooth, absorbent and see-through.</p> <p>Objective – <u>Material element identification</u></p> <p>Students are to find a photo graph one of each: strong, bendy, waterproof, stretchy, soft, smooth, absorbent and see-through.</p> <p>Extension – Students can find multiple of each material element.</p>	<p>Camera</p> <p>*household objects</p>
Year 2	Perfect Weather	<p>Students are to create the perfect outfit to survive three conditions: Heat, Cold, Wet.</p> <p>Objective - <u>Students will make educated decisions on what clothing best suits certain environments.</u></p> <p>Heat – Using Household clothes from all family members – Create an outfit to wear if stuck out in a hot environment for two days straight. Photograph and label.</p> <p>Cold – Using Household clothes from all family members – Create an outfit to wear if stuck out in a cold environment for two days straight. Photograph and label.</p> <p>Wet – Using Household clothes from all family members – Create an outfit to wear if stuck out in a wet environment for two days straight. Photograph and label.</p> <p>Extension – Reduce each costume by one item of clothing. Why did you remove that item?</p>	<p>Camera</p> <p>*household objects</p>
Year 3	Will it freeze?	<p>Students are to predict if six different liquids will freeze</p> <p>Objective – To make an educated guess on what liquids will freeze.</p> <p>Using containers: mugs, Ice cube trays, Plastic bottle etc... students are to choose six liquids around the house and predict if they will freeze.</p> <p>Prediction – Will the liquids freeze? Why/Why not? What causes liquids to freeze?</p> <p>Extension – Time study of the liquids. Why froze first? Which froze last?</p>	<p>*Household containers</p> <p>*Household liquids</p>
Year 4	Liquid Layers	<p>Students are to test the density of multiple liquids.</p> <p>Objective - <u>Check the theory that liquids will settle into correct density order or must be placed in the correct order.</u></p> <p>Container One – Pour in the six liquids in order of what you deem is the thickest/has the most density. Pour gently down the side of the cup and let each layer settle.</p> <p>Container Two – Pour in the six liquids in a random order. Pour quickly and into the middle of the cup. Leave containers overnight.</p> <p>Prediction – Will the two cups remain as they are or will the settle and be the same after 24 hours?</p> <p>Extension – What other liquids could be added?</p>	<p>Two containers</p> <p>Oil</p> <p>Honey</p> <p>Syrup</p> <p>Food colouring/Water</p> <p>Dishwashing Liquid</p> <p>Vinegar</p> <p>*Other liquids may be substituted.</p>
Year 5	STEM Shoebbox Oven	<p>Students are to construct a shoebox oven to melt an object</p> <p>Objective – <u>To see if household materials could cook/defrost food during a power outage.</u></p> <p>Construct shoebox oven with alfoil lining and place in the sun. If wanted, add a cellophane window to allow sunlight in. Place ice/chocolate inside and time how long it takes to melt. What factors could affect the time?</p> <p>Prediction – Will ice melt? How long will it take? Will chocolate melt? How long will it take?</p> <p>Extension – Could the oven be used to cook food such as meat?</p>	<p>Cardboard box</p> <p>Alfoil</p> <p>Sticky Tap</p> <p>Cellophane</p> <p>Ice cube</p> <p>Chocolate square</p>
Year 6	Hot Gas	<p>Students are to see if water temperature can affect the density or a gas inside.</p> <p>Objective – To observe if heated air in a bottle will expand a balloon place on top.</p> <p>Parent supervision required!</p> <p>Place a balloon over an empty water bottle. Boil water and then place in a heat proof bowl. Carefully place the bottom of the bottle into the bowl. Using String, Measure the circumference of the balloon. Repeat every five minutes until water is cool. Record circumferences.</p> <p>Prediction – Will the balloon expand at all? Will there be a massive difference between five minute tests</p> <p>Extension – Place some water in bottom of bottle. Will that cause more heat to be produced or less?</p>	<p>Balloon</p> <p>Plastic Bottle</p> <p>String</p> <p>Heat Proof container</p>