

Santa's STEM Workshop **Activity Sheet**

We've put together a whole range of fun Christmas activities for you to enjoy in the classroom, at home or whilst the Christmas dinner is cooking! Seasons Greetings from the IET.

Word search puzzle

Which words from the list can you find in the grid?



For more fun activities visit:

CHRISTMAS RUDOLPH ELF STEM **HOLIDAYS** SNOWMAN ANGEL CRAFTS SANTA CLAUS **CAROLS** CELEBRATE **BAKING PRESENTS FESTIVE EXPERIMENTS FAMILY BAUBLES** SLEIGH ADVENT

TREE



Colouring

Bring this festive scene to life in your own way.

Why not try these Christmas activities for yourself and challenge your friends too? We'd love to see how you get on so please ask your parent / guardian to send in any photos of your makes to ieteducation@theiet.org or tag us on social media @IETEducation #SantasSTEMworkshop #SantaLovesSTEM.

- Make a model with wheels and race it against your friends.
- 2. Create a marble run/bauble run where the run time is over 30 seconds.
- 3. Build Santa a new sleigh from an empty cereal box.
- 4. Create a Christmas scene from LEGO®.
- 5. Make a reindeer sock puppet.

Anagrams

Can you unscramble the Christmas words?

- e) kyruet i) Isleb a) rats listen m) b) acrcrke f) niderere i) eret n) ticksong c) manswon k) persntes o) dingdup g) tsana
- d) carlo h) yohll l) dluhpro

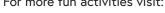
* Hot chocolate science experiment

Materials needed:

- Two mugs (microwaveable)
- Water
- Milk
- Hot chocolate mix
- Spoon
- Thermometer
- Marshmallows

Instructions:

- 1. Pour 6 ounces of water into one mug and 6 ounces of milk into the other mug.
- 2. Ask an adult to microwave both mugs for 1 minute 30 seconds each, or until the water and milk are hot.
- 3. Ask an adult to remove the mugs from the microwave, be careful, the mugs will be hot. You will then need to add the same amount of hot chocolate mix to each mug and stir until it is completely dissolved.
- 4. Measure the temperature of each mug and record the data. (Hint: the hot chocolate made with water should be hotter).
- 5. Next, place the same number of marshmallows in each mug and start the timer. After set time intervals, record how many marshmallows have dissolved. (Hint: the marshmallows in the hot chocolate made with water should dissolve more rapidly because the water should be hotter. The hotter the liquid, the quicker the sugary marshmallows will dissolve).
- 6. Time for you to plan your own extension to this experiment! Why not use different liquids, different mugs, different sweets, different hot chocolate powder, etc. Remember to record your results and then you can compare and evaluate.



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