Science activities:

Melting Experiment:

Equipment:

* Hot beakers x2 (one big and one smaller)
* Dark chocolate
* White chocolate
* Water
* Thermometer

Find out the different melting point of different chocolate (dark and white)

1. Put some hot water (no more than 50°C) into a beaker
2. Put in a thermometer
3. Take the temperature of the chocolate when not yet melted
4. Add the chocolate to a different beaker and put that beaker inside the hot water
5. Stir and take temperature when it starts to melt and when it has fully melted
6. Record your findings in a table as seen here
7. Repeat steps 1-6 with white chocolate

Questions based on your experiment:

1. You are going to Spain on holiday and you take some chocolate with you. Considering it’s melting point, which chocolate would you bring and why? Use the findings collected in your experiment
2. How would you make sure it won’t melt anyway?

|  |  |  |  |
| --- | --- | --- | --- |
| Chocolate | Temperature of chocolate | Temperature of chocolate when melting | Temperature of chocolate when fully melted |
| Dark |  |  |  |
| White |  |  |  |

Freezing Experiment:

1. Fill 3 balloons up with water to make small balloons (don’t make them too big, they will have to fit in the freezer!)

2. Freeze the balloons over night

3. Take out the balloons and cut away the balloon from the ice

4. Investigate using your magnifying glass and torch in the dark (are there patterns? What do you notice?)

5. Add cold water to one balloon (time how long it takes to melt)

6. Add hot water to one ice balloon (time how long it takes to melt)

7. Add salt to one ice balloon (time how long it takes to melt)

8. Add food colouring to the salty ice balloon and the melting becomes clearer (what do you notice?)

8. Record your findings in a table

Extension:

1. Why did the salt melt the ice?

2. What did I notice when I added food colouring to the ice balloons?

|  |  |  |  |
| --- | --- | --- | --- |
| Balloon | Change | How long does it take to melt? | What do I notice? |
| 1 | Warm water |  |  |
| 2 | Cold water |  |  |
| 3 | Salt |  |  |
| 3 | Added food colouring to the salt |  |  |

Equipment:

* 3 balloons
* Salt
* Water
* Freezer
* Magnifying glass
* Torch
* Food colouring (optional)