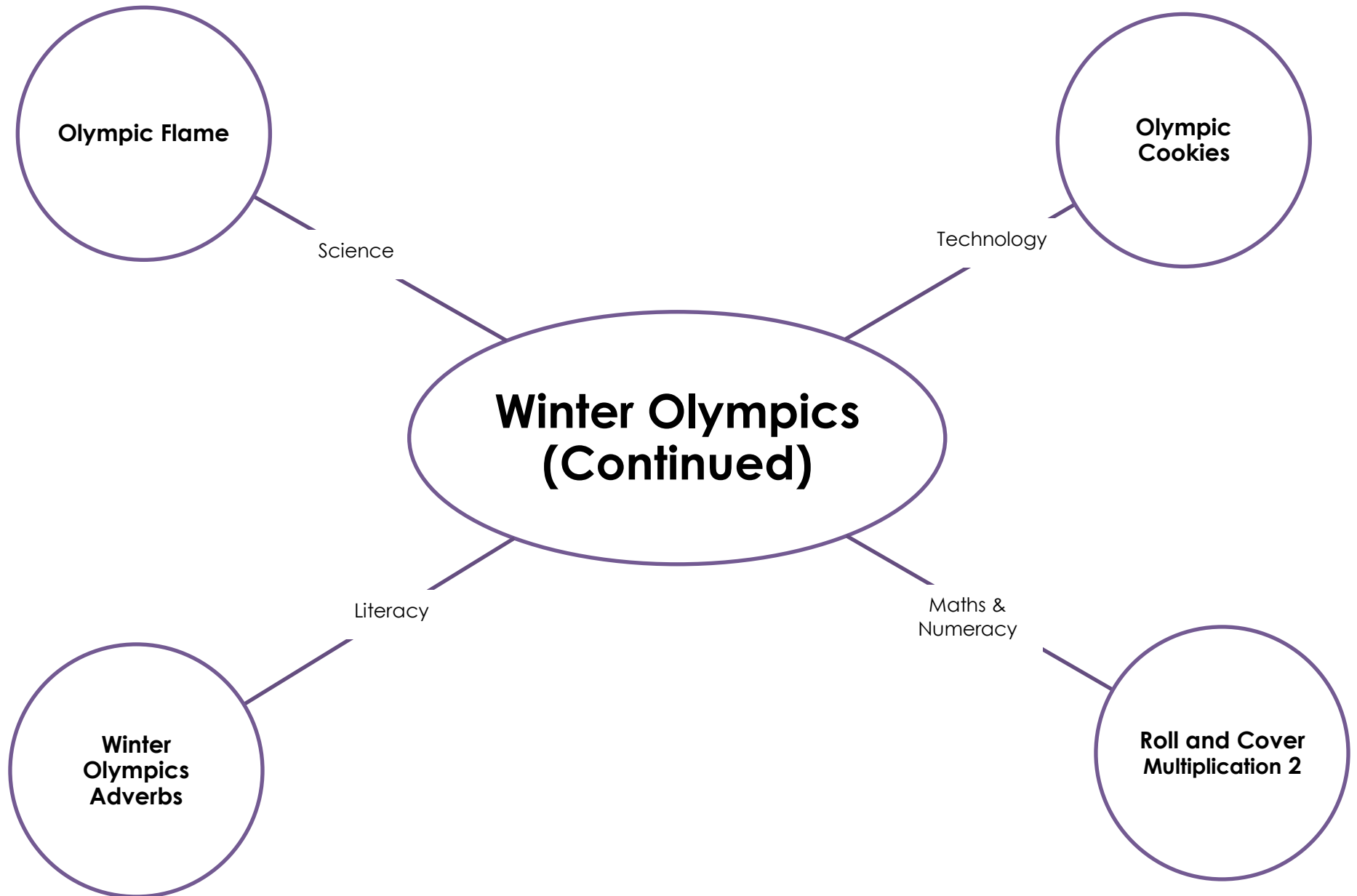


Learning from Home



Science Challenge



Olympic Flame

Constant Adult Supervision and Assistance Required!

Months before the games begin, the Olympic flame is lit at Olympia, Greece. This ceremony starts the Olympic torch relay, which ends with the lighting of the Olympic cauldron during the opening ceremony of the Olympic Games. The flame continues to burn in the cauldron for the duration of the Games, until it is extinguished during the Olympic closing ceremony.

So, what does a flame need to keep burning? Air (oxygen), heat, and fuel (something to burn) are frequently referred to as the **'fire triangle'**. If you take one of these things away, the fire will go out.

To test whether this is true we can try an experiment:

You will need:

3 candles and 3 glass jars (1 large, 1 small, and 1 medium).



Method:

1. Talk to a grown up about what you think **(predict)** will happen when a flame is covered up with a jar. Will it matter what size the jar is? Why?
2. Ask the grown up to light three candles of the same size and then cover them with the three jars. **(Do not do this by yourself!)**
3. Watch what happens then discuss this with the grown up.

You should see that the flame in the small jar quickly goes out. The candle in the medium jar may last twice as long and the candle in the large jar much longer.

The Science:

This experiment demonstrates that fire needs air (oxygen) just like we do. If a fire is denied air, then it will go out. There is more air in the large jar, so the flame burns longer.

Removal of oxygen from a fire can be achieved by using a fire extinguisher or by using a fire blanket. Fire doors can also be helpful at blocking any more air from getting into a room where an active fire is burning.

If you ever find an unexpected fire in your house, get out and call 999

Technology Challenge



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Olympic Cookies

Adult Support Required

You will need: 2 round cookie cutters (1 bigger than the other), food colouring, gold food sprinkles and liquorice rope (to use as a ribbon)

Ingredients:

½ cup butter, softened,
 ½ cup sugar,
 ½ cup sour cream,
 1 egg, beaten,
 1 tsp. vanilla essence,
 1 tsp. lemon juice,
 2 ½ cups flour,
 1 tsp. baking powder,
 ½ tsp. salt,
 ½ tsp. baking soda

Icing:

1 cup icing sugar,
 Warm water (from a
 pre-boiled kettle)

**Always wash your
 hands before
 preparing food.**

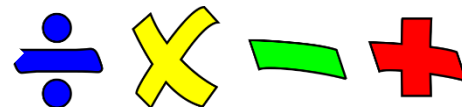


Directions:

1. Cream together the butter and sugar.
2. In a separate bowl, combine the dry ingredients.
3. Mix in sour cream, egg, vanilla essence and lemon juice.
4. Add the dry ingredients and mix thoroughly.
5. Cover and chill in the refrigerator for at least 1 hour.
6. Roll the dough on a floured surface. Roll it very thin as it will puff up slightly during baking. Use the larger cookie cutter first and then use the smaller one on the inside. The outside of the circle will become your Olympic rings and the inside will become medals.
7. Bake for 8-10 minutes at 180 degrees C / Gas Mark 4.
8. Cool completely.
9. Meanwhile, gradually add the warm water to the icing sugar, drops at a time, until it becomes thick enough to coat the back of a spoon. Split up the icing into separate bowls and add your food colouring. To make the 'black' food coloring, mix all the colors together until it looks about right.
10. Ice the cookies using lolly sticks or new paintbrushes and let the glaze harden
11. For the medals, ice each cookie with yellow icing then cover them with gold sprinkles while the icing is still "wet".

Recipe and images from www.icanteachmychild.com

Maths & Numeracy Challenge



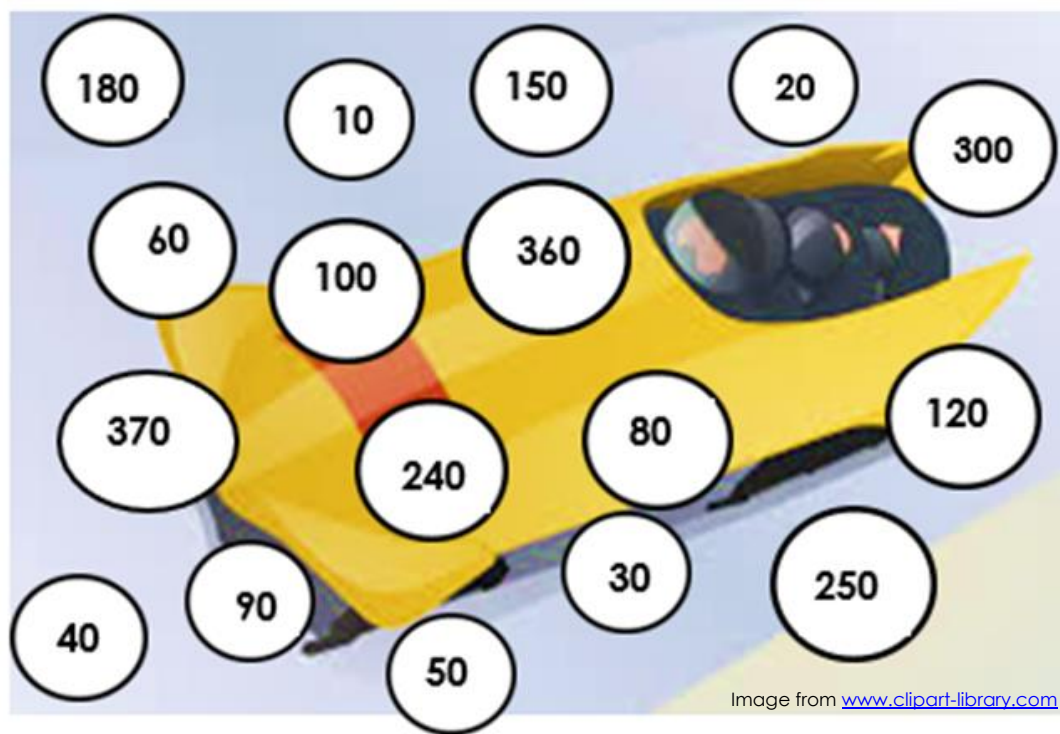
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Roll and Cover Multiplication 2

Today we are going to play a dice game to help us with our multiplying.

You will need: 2 dice and something to cover up the numbers on the bobsleigh team below. You could use counters or tokens if you have some or you could cut out some pieces of paper or card if you prefer.

Instructions: Roll two dice and multiply the numbers together. Next multiply the answer by 10 to find the product. Look for the answer and cover it up with your token or paper.



You can play this game by yourself or with someone at home. If they use a different colour than you then at the end you can see who has the most tokens. If you play alone, you could ask a grown up to time you – can you get quicker the more you play?

Questions

1. There are 2 possible answers which have not been included – what are they?
2. Which answer is impossible?



Literacy Challenge



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Winter Olympics Adverbs

Adverbs are used to describe verbs. They give you more information about how something (an action) is carried out.

The player scored **quickly**.
The lady sang the anthem **beautifully**.



Use an adverb from the word bank to fill in the blanks in the sentences below.

strongly	quickly	skillfully	speedily	slowly
proudly	bravely	gracefully	amazingly	
forcefully	excitedly	loudly	noisily	

1. The curler pushed the stone _____ across the rink.
2. The bobsleigh team raced _____ down the track.
3. The figure skater jumped _____ during his routine.
4. The speed skaters moved _____ around the ice.
5. The crowd clapped _____ during the event.
6. The downhill skier moved _____ through the flags as he glided down the slope.
7. The medal winners _____ collected their awards.
8. The ice hockey team captain was shouting _____ at his teammates.

Extension: Write six of your own sentences about the Winter Olympics and make sure you include an adverb in each.

Image from www.clipart-library.com