

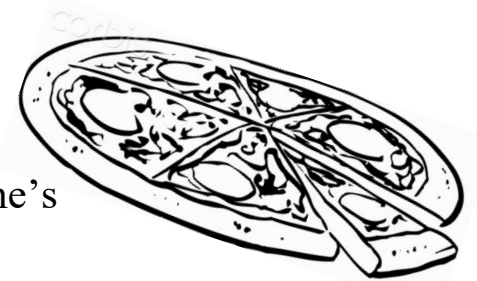
Activity: Symmetrical Pizzas

You will need: A pitta bread or ready made individual pizza base for each person, tomato puree or ready made pizza sauce, toppings of your choice - cheese, tomatoes, pepper, mushrooms etc., plates, knives.

Before you start: - Toppings can be pre-cut/sliced, or alternatively this can become part of the activity.

Instructions:

- Discuss the importance of hygiene when preparing food and wash hands thoroughly.
- Explain that you are going to make a delicious and healthy pitta pizza but that everyone's pizza has to be symmetrical. Talk with children about what this means.
- Ask everyone to start by taking a couple of slices of pepper to put down the middle of their pitta bread. This is the 'mirror line'. Whatever they place on one side of this mirror line has to be matched by the same sort of food on the other side.
- Place some items together. For example, ask each child to take a slice of cheese and place it on one side of the mirror line. Ask them to think carefully about how they are putting it down. They then need to take another slice and place it on the other side of the pizza so that it is symmetrical.
- Matching pieces of food need to be the same distance away from the mirror line (one on either side of the pizza).
- Matching pieces of food need to be placed at the same angle to the mirror line.
- Encourage children to continue to put onto their pizza but to make sure that they keep their pizza symmetrical.
- When completed, the pizzas can be cooked in a medium oven for 10-12 minutes.





- What is special about symmetrical patterns?
- If you placed a tomato here, where do you need to place another tomato to keep your pizza symmetrical?
- How do you know exactly where to place the matching piece?
- How many slices of mushroom have you put on your pizza altogether? Is that number even or odd? Why?

The mathematics

This activity helps children gain experience of making a pattern with one line of symmetry. Through physical experience of placing food onto the pizza, they begin to understand that matching pieces need to be exactly the same distance from the mirror line and that they need to consider the angle at which they are placed.

Simplifications:



Discuss where each piece of food is placed with the children.

Encourage children to place the pizza in front of them so that their pepper 'mirror line' is vertical.

You may wish to use mirrors for children to check whether their pizza is symmetrical.

Challenges:



Encourage children to lay slices of vegetables at an angle to the mirror line (so that sides are not placed parallel to the line of symmetry).

Encourage children to place the pizza in front of them so that their pepper 'mirror line' is not horizontal or vertical.