Barefoot

Unlock the future of your classroom

Unit:
Pizza Party

Lesson 4 of 5
Pizza Making & Pizza Party

Activity Duration: **60 mins**

Principal partners

BT   Computing at School

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Concepts and approaches covered

Debugging
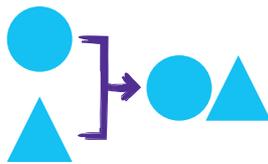
Algorithms

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Overview

In this lesson pupils make their pizzas and the class enjoys a pizza party!

Learning objectives

☑ **To debug an algorithm**

☑ **To follow a recipe algorithm to create a pizza**

Computing concepts and approaches

- Pupils **debug** and follow a recipe **algorithm** to **create** their pizza

Resources

☑ **Lesson presentation**

☑ **Groups' pizza topping spreadsheets from lesson 2**

☑ **Pizza ingredients**

☑ **Baking facilities**

☑ **Pizza party supplies (optional)**

☑ **Camera (and video) recording equipment**

Introduction

- Prior to the lesson set up the classroom with the ingredients and utensils ready to make the pizzas

- Write a recipe on the board for making pizzas where the order of the steps are mixed up (a simple pizza recipe can be found **here**). You could pretend that you don't realise and start to make your pizza!

- Work with the class to rearrange the instructions into the right **sequence** (slide 3)

- Remind pupils that the recipe can be thought of as an **algorithm** that a person can carry out and they have just **debugged** it (slides 4 & 5)

- Highlight that algorithms are normally for computers to follow, but whilst we are learning about algorithms we can have humans following them, but that the human will have to follow this one very carefully and accurately to make a successful pizza!

- You may wish to remind pupils of their chosen toppings by showing them their groups' 'pizza topping spreadsheet' from lesson 2

Main activities

Pizza making
- Ask pupils to follow the recipe algorithm and make their pizzas

- Take videos or photos of them working (for next lesson). If you have enough cameras or mobile devices, you could ask pupils to work in pairs to record each other creating their pizza

Pizza party!
- When the pizzas are cooking you can all get ready for the party

- Get into the pizza party spirit with some Italian music (you could learn an Italian song), Italian decorations and even costumes if you like. Once the pizzas are ready, enjoy them and your class pizza party!

Plenary

- Show the video and images you took of the pupils making their pizzas and enjoying the pizza party

- Invite pupils to think-pair-share what they have learnt so far in this project, including key terms such as: data collection, data attributes, data values, data modelling, spreadsheets, use of spreadsheet functions, Italian words and any pizza making tips they have learnt!

Differentiation

Support:
- Additional adult support working with pupils in small groups may be required for the pizza making

Stretch & challenge:
- Pupils could be given responsibility to take video and/or photographs of the pizza party. They should ensure they have at least one 'good' picture of everyone in the class (and be encouraged to decide what 'good' means – clear, in focus, good composition etc)

Assessment suggestions

Teacher observation:
- Are pupils able to debug the recipe algorithm?

- Do pupils follow the recipe algorithm accurately to create their pizza? Do they add extra steps? Do they amend the recipe where needed or note that the algorithm is not very precise?

Informal assessment of pizza
- Were pupils able to create their pizza successfully?

Examples of questions to assess understanding:
- How did you debug the algorithm? What is precise? Which steps were incorrect? Why?

- What problems did you have and how did you overcome these?

- How did you fix them?

- What tips would you give to someone else wanting to make their own pizza?

- Could a machine follow the algorithm? Why or why not?

Extension ideas

- You could take the Italian topic further and learn more Italian words and about more Italian food

- You could extend computing learning by asking pupils to create a program that makes a pizza from their algorithm, using this **KS1 Barefoot Computing 'Pizza Pickle' activity** as a basis for ideas

- Find out about the food manufacturing industry. How are pizzas made?
  Both in local pizza shops and for sale in supermarkets. What algorithms are used?
  What technology? What careers are involved in food manufacturing and sale?

Get more **Barefoot**

Have you had a great Barefoot workshop, or delivered a fun computer science lesson? Send us your comments and pictures via our social channels to help get more teachers involved!

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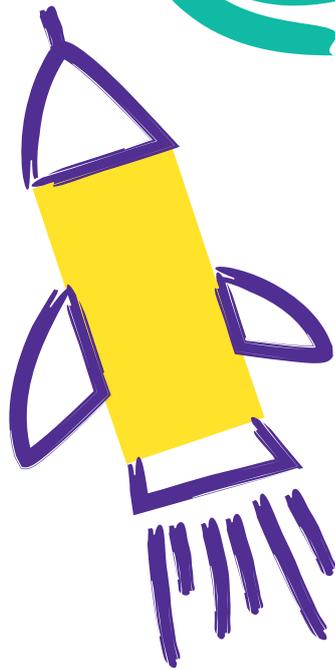
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