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# **Table of Topics**

	Topic	Keyword Titles	Spec Point
1	Food Science	Why food is cooked and heat transfer	3.3.1.1
2		Selecting appropriate cooking methods	3.3.1.2
3		Functional and chemical properties of proteins, fats and carbohydrates	3.3.2.1–3.3.2.3
4		Fruit, vegetables and raising agents	3.3.2.4-3.3.2.5

## **Teacher's Introduction**

### **Overview**

This resource has been produced to support teaching and learning of the **AQA GCSE Food Preparation and Nutrition** specification. The learning content is covered by the following sets of keywords with matching descriptions, which cover all of the Learning Aims for the following topics:

- Why food is cooked and heat transfer
- Selecting appropriate cooking methods
- Functional and chemical properties of proteins, fats and carbohydrates
- Fruit, vegetables and raising agents

For each set, there are a number of different keyword activities on CD designed to give you a range of different options for classroom, homework and revision. This variety enables you to take a different approach to different topics – such as using the Crosswords as homework for one topic, and the Match Up as a starter for another.

Alternatively, differentiate the activity for a given topic; for example, you might want to give your stronger students the **Crosswords** early on while you start weaker learners on the **Match Up** (where terms and definitions are both available). **Domino** and **Bingo** activities add an element of fun and reinforcement, as well as potential for pair and group work. Finally, the **Flash Cards** come into their own for revision and the **Table Fill** and **Write Your Own Glossary** allow students to test their understanding by correctly filling in keywords or definitions.

For more information about the different activities included, see overleaf ->

### **Digital Format!**

All of the activities are provided electronically on the accompanying CD. To use on a school network, the entire contents of the CD needs to be copied and pasted into an accessible location.



 $\rightarrow$ 

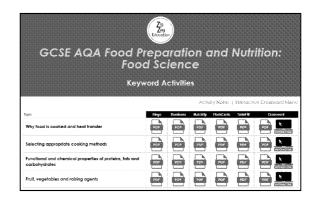
Providing easy access to the activities are two HTML menus:

#### 1. Access All Menu

Location: index.html

This menu, designed primarily for teacher use, includes links to everything on provided on the CD – allowing you to easily select what you need when preparing your lessons.

If you intend to give learners access to this menu, then be aware that it does include links to the solutions.



### 2. Interactive Crossword Menu

Location: interactive-crosswords/index.html

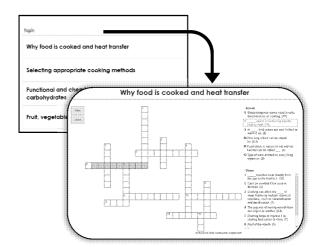
This menu, which can be accessed via the *Access All* Menu is included to allow learner access to just the interactive crosswords (without the answers).

## Free Updates!

Register your email address to receive any future free updates\* made to this resource or other Food Preparation and Nutrition resources your school has purchased, and details of any promotions for your subject.

\* resulting from minor specification changes, suggestions from teachers and peer reviews, or occasional errors reported by customers

Go to zzed.uk/freeupdates



### **Activity Types**

All activities are provided as PDF files, allowing for easy printing and sharing on your school's internal network or VLE. In addition, each of the single-page activities (crosswords, match up and table fill), as well as the solutions, are provided on paper too.

The activities included in this resource are as follows:

#### Bingo

Each student is given a different bingo card containing a selection of words from the set. The teacher reads the definitions using the Keyword Answers and the student must match the definition to the words on their card to complete rows, columns, and the full bingo card.



#### Crosswords

These traditional keyword activities are equally effective as lesson or homework activities - and are also an excellent way to ease students into their revision programme.





In addition to the photocopiable worksheets and pdf, the crosswords are provided in interactive format on the accompanying CD-ROM. These are web-based (HTML5) and will run straight from your Internet browser.

#### **Dominoes**

This is essentially another match-up activity, but this one is designed to be used in a more active way to engage students. It is recommended that students work in pairs or small groups.



Half of each card contains a keyword, and the other contains a description. To complete the activity, students must align all the cards in the correct order. There is a 'Start' and a 'Finish', meaning that if any cards are left outside of the chain, then students have gone wrong somewhere.

#### Match Up

Students match descriptions to their keyword by drawing lines between them. Because there are similar descriptions and keywords, students are likely to make the odd mistake



while completing the activity, so it is recommended that they use a pencil to start with! By eliminating the keywords that they are familiar with, students can then think about and learn the ones that they are less confident with.

#### Flash Cards

These are a helpful revision tool. To make the cards, fold the page in half, then cut each card and stick together so the keyword is on one side and the definition the other. In addition, students could use these to play a game of pairs. Cut each card in two and place face down on the table.



Students will then take it in turns to turn over two cards with the aim of matching up a keyword to its definition. Matched up cards are removed and the game is finished when all the cards have been matched.

#### **Table Fill**

Nothing fancy – students simply write the keyword which is being described, without any other help. Because this activity tests the students' own knowledge, it is best used as a



homework activity at the end of each topic or during revision. This then acts as a check that they have grasped the key terminology for each topic. Alternatively, they could be given to students at the beginning of the topic, to see what they already know.

### **Write Your Own Glossary**

Like the Table Fill, this activity can be used to test pupils before learning a topic, or as a revision tool after learning a topic. Students are given a list of the keywords and need to produce their own definitions. Using Table Fill and Write Your Own Glossary, lessons can be differentiated for all levels of learner.

✓ PDF

# **Selected Activities and Completed Glossary Page**

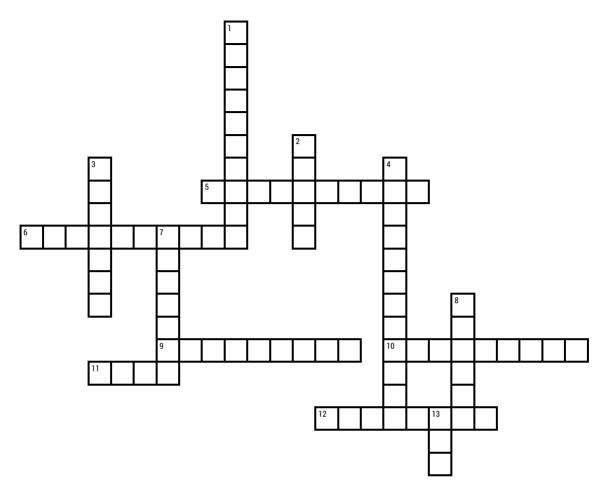
This sample shows <u>one</u> example of several activities.

The whole resource contains approximately 30 activities –

6 or 7 activities for each of the 4 topics.

The resource covers 76 key terms.

## Why food is cooked and heat transfer



#### **Across**

- **5** Electromagnetic waves used in radio transmissions or cooking. (10)
- 6 \_\_\_\_\_ needs a medium to transfer heat to food. (10)
- 9 In \_\_\_\_\_, heat waves are sent to food to warm it up. (9)
- 10 How long a food can be stored for. (5,4)
- 11 Food which is secure to eat and not harmful can be called \_\_\_. (4)
- 12 Type of wave emitted by every living organism. (8)

#### Down

- 1 \_\_\_\_ transfers heat directly from the pan to the food in it. (10)
- 2 Can't be smelled if the nose is blocked. (5)
- 3 Cooking can affect the \_\_\_\_ of meat thanks to multiple chemical reactions, such as caramelisation and denaturation. (7)
- 4 The process of moving warmth from one object to another. (4,8)
- 7 Cooking helps to improve it by making food easier to chew. (7)
- 8 Roof of the mouth. (6)
- **13** Food which is in its natural state, before any heat treatment or processing. (3)

# Why food is cooked and heat transfer (Table Fill)

All actions and procedures taken to ensure that food is not harmful and is secure o eat.
Movement of thermal energy from one object to another, resulting in an increase n temperature.
The combined sensation of taste, smell and mouthfeel, which can be greatly altered and improved during cooking.
The consistency of a food product, usually created or altered during cooking.
The smell of food, usually more prominent in hot foods than in cold ones.
Ferm that refers to whether food is pleasurable and agreeable to the palate.
Food which is in its natural state, before any heat treatment or processing.
Process in which heat is transferred directly to the food via vibration of the pan's molecules.
Process in which heat is transferred to food indirectly through water or oil, or another medium, such as air.
Process in which heat is transferred to food indirectly by sending heat waves to t.
Electromagnetic waves used in radars, radio transmissions or cooking, which quickly heat up water particles.
Type of invisible radiation emitted by every living organism, used in grills and ovens to transfer heat to the food.
Durability – the amount of time during which a food can be safely stored and eaten.

# Why food is cooked and heat transfer (Match Up)

1	All actions and procedures taken to ensure that food is not harmful and is secure to eat.
2	Durability – the amount of time during which a food can be safely stored and eaten.
3	Electromagnetic waves used in radars, radio transmissions or cooking, which quickly heat up water particles.
4	Food which is in its natural state, before any heat treatment or processing.
5	Movement of thermal energy from one object to another, resulting in an increase in temperature.
6	Process in which heat is transferred directly to the food via vibration of the pan's molecules.
7	Process in which heat is transferred to food indirectly by sending heat waves to it.
8	Process in which heat is transferred to food indirectly through water or oil, or another medium, such as air.
9	Term that refers to whether food is pleasurable and agreeable to the palate.
10	The combined sensation of taste, smell and mouthfeel, which can be greatly altered and improved during cooking.
11	The consistency of a food product, usually created or altered during cooking.
12	The smell of food, usually more prominent in hot foods than in cold ones.
13	Type of invisible radiation emitted by every living organism, used in grills and ovens to transfer heat to the food.

food safety	
heat transfer	
flavour	
texture	
aroma	
palatability	
raw	
conduction	
convection	
radiation	
microwaves	
infrared radiation	
shelf life	

# Why food is cooked and heat transfer

