- 1 Name the method of heat transference in each of the pictures.
- 2 Annotate and explain how heat is transferred for each cooking method.

# Barbecue kebabs



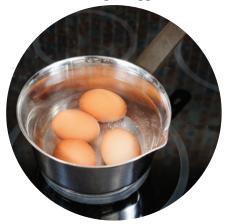
Heat transference method:

Roasting a chicken in the oven



Heat transference method:

Boiling an egg



Heat transference method:

Baking a cake



Heat transference method:

Grilling cheese on toast



Heat transference method:

Stir frying vegetables

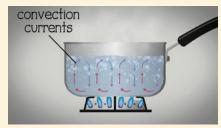


Heat transference method:

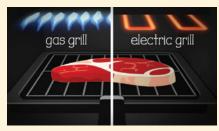
# **Conduction**



# Convection



### **Radiation**



#### **Task**

- 1 The diagrams show the principles of heat transference methods. Produce a fact sheet with additional diagrams and detailed explanations showing how heat is transferred to food.
- 2 Name and explain how heat is transferred when making these dishes.
  - Boiling pasta in saucepan
  - Barbecuing chicken drumsticks
  - Grilling cheese on toast
  - Baking a cake
  - Making a stir fry
  - Poaching an egg
  - Baking a potato in the microwave oven
  - Steaming broccoli

3c

Study the images below and explain why you would cook the food in question (to make it safe, for example). Then suggest a way of cooking it, for example, boiling, baking, grilling....

	oking it, for example, boiling, baking		
Food	Why do we cook it?	Food	Why do we cook it?
fish	Way of cooking it	chicken	Way of cooking it
Food	Why do we cook it?	Food	Why do we cook it?
dried pasta	Wily do we cook it:	bread dough	Wily do we cook it:
	Way of cooking it		Way of cooking it
Food	Why do we cook it?	Food	Why do we cook it?
rice	Way of cooking it	carrots	Way of cooking it
Food	Why do we cook it?	Food	Why do we cook it?
kidney beans	Way of cooking it	mixed berries	Way of cooking it

The image below shows a traditional British dinner but the components were cooked in a variety of different ways. Identify the possible cooking methods that were used for each item and the methods of heat transfer involved.



Food	Cooking method	Type of heat transfer
1. Roast potatoes	Roasting	Convection, conduction
2.		
3.		
4.		
5.		
6.		
7.		
8.		

w would I cook this?

Look at the 11 foods below. For each one, choose the correct method of cooking it and the heat transfer involved from the lists shown.

Some cooking methods will involve more than one type of heat transfer.

#### Cooking methods

- Boiling
- Steaming
- Stir frying
- Grilling
- Microwaving

- Poaching
- Stewing
- Deep fat frying
- Toasting
- Induction cooking

- Braising
- Sautéeing
- Roasting
- Dry frying

- Simmering
- Shallow frying
- Baking

Dish/food	Cooking method	Heat transfer method(s)



Dish/food	Cooking method	Heat transfer method(s)

1	Why is grilling a healthier method of cooking than frying? (1)
2	How is heat transferred to food when it is grilled? (1)
3	Why must pieces of meat for grilling be no more than 3.5cm thick? (1)
4	Name two types of frying. (2)
5	What should you do if a pan of oil catches fire? (2)
6	What must you <u>not</u> do if a pan of oil catches fire? (2)
7	Why are some foods coated in egg and breadcrumbs or batter before they are fried? (3)
8	Why must oil be hot enough before you start to fry food in it? (2)
9	Why is stir frying quite a healthy cooking method? (2)
10	How is heat transferred to food when it is roasted? (1)
11	Why do roasted vegetables have a good robust flavour? (2)
12	Why do baked items such as bread, cakes, etc. need to go into a hot oven? (1)
13	Explain why in gas ovens, the top of the oven is the hottest part. (2)
14	What is the method of heat transfer in boiling? (1)
15	How can you conserve vitamins when boiling vegetables? (3)
16	Name two foods that can be poached. (2)
17	Why is steamed food suitable for young children, elderly people and people recovering from an illness? (2)
18	Explain how meat becomes tender when it is stewed. (4)
19	Explain how food is heated and cooked by a microwave oven. (3)
20	Names three uses of a microwave oven when preparing and cooking food. (3)
To	tal score out of 40 =