

## 3.3 Food science: 3.3.1 Cooking of food and heat transfer

Sc1 I can explain why food is cooked			
Sc2 I can describe the different methods of heat transfer, including conduction, convection and radiation			
Sc3 I can describe how preparation and cooking affect the appearance, colour, flavour, texture, and overall palatability of food			
Sc4 I can describe how different preparation and cooking methods can change nutritional value and taste, including water based, dry and fat based methods			
Sc5 I can select appropriate preparation, cooking methods and times to achieve desired characteristics			

## 3.3 Food science: 3.3.2 Functional and chemical properties of food

Sc6 I can describe and/or demonstrate the scientific principles behind protein denaturation, protein coagulation, gluten formation and foam formation when preparing and cooking food			
Sc7 I can outline the functional and chemical properties of proteins			
Sc8 I can describe and/or demonstrate the scientific principles behind gelatinisation, dextrinisation, and caramelisation when preparing and cooking food			
Sc9 I can outline the functional and chemical properties of carbohydrates			
Sc10 I can describe and/or demonstrate the scientific principles behind shortening, aeration, plasticity and emulsification when preparing and cooking food			
Sc11 I can outline the functional and chemical properties of fats and oils			
Sc12 I can describe the scientific principles behind enzymic browning and oxidation, and choose appropriate preparation methods to prevent potential issues			
Sc13 I can outline the functional and chemical properties of raising agents, including chemical, mechanical, steam based and biological			
Sc14 I can describe and/or demonstrate the scientific principles behind chemical, mechanical, steam and biological raising agents when preparing and cooking food			

Date:

Student Reflection:

Teacher Comment: