

Macronutrients Activity Challenge Colouring Page

KS4 / GCSE / Year 11 - Food Preparation And Nutrition

Complete the missing macronutrient and compare its function and sources with carbohydrate and fat.

MACRONUTRIENTS

Complete the missing macronutrient and explain its function

CARBOHYDRATE

FUNCTION

major energy source

SOURCES

starch and sugars

FAT

FUNCTION

concentrated energy; insulation; cell membranes

SOURCES

oils, nuts, dairy, oily fish

MISSING

FUNCTION

growth and repair; enzymes and hormones

SOURCES

amino acids from varied protein foods

BALANCED DIET

Macronutrients are needed in relatively large amounts

Micronutrients and fibre are also essential

Energy intake should match individual need

carbohydrate

fat

protein

vitamins + minerals

fibre + water

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Parent & Teacher Guidance

Curriculum focus

Topic: Macronutrients. Develop accurate observation, subject vocabulary and evidence-based explanation. Mapped scope: DfE GCSE subject content and key stage 4 curriculum entitlement.

Before you begin

Review the picture together and ask the learner what they already notice about Macronutrients. Read the activity aloud, explain unfamiliar vocabulary, and agree which details need special attention.

Solo activity

The learner can complete the colouring independently, then use the finished page to explain three details linked to Macronutrients. Encourage accurate colour choices where they carry meaning, but allow creative choices elsewhere.

Group activity

Give pairs or small groups different areas to inspect. Ask them to agree on evidence before colouring, compare their findings, and present one curriculum fact to the class. Finish with a whole-group check against the guidance below.

Questions to guide discussion

What evidence can you see? Which feature is most important and why? How does one part connect to another? What new fact about Macronutrients can you explain using the picture?

Answers and checking

The missing macronutrient is protein. Protein provides amino acids for growth and repair and is used to make enzymes and some hormones. Carbohydrate and fat are major energy sources; fat also supports insulation, membranes and fat-soluble vitamin absorption.

Learning record and next steps

☐ Completed the colouring

☐ Explained key vocabulary

☐ Completed the activity

☐ Used visible evidence

Evidence noticed / vocabulary used

Next step:
