

4. Biological molecules

Starter Quiz · 课前小测

IGCSE Biology

Name: _____ Score: _____

1. Proteins are built from smaller units called:

- ☐ amino acids
- ☐ glucose
- ☐ fatty acids
- ☐ glycerol

2. A positive iodine test for starch gives a:

- ☐ blue-black colour
- ☐ brick-red colour
- ☐ purple colour
- ☐ cloudy white emulsion

3. Carbohydrates are made of which three elements?

- ☐ carbon, hydrogen and oxygen
- ☐ carbon, nitrogen and oxygen
- ☐ hydrogen, nitrogen and sulfur
- ☐ carbon, hydrogen and nitrogen

4. Benedict's solution, when heated with a reducing sugar, turns:

- ☐ brick-red
- ☐ blue-black
- ☐ purple
- ☐ colourless

5. Lipids (fats) are made from fatty acids and:

- ☐ glycerol
- ☐ glucose
- ☐ amino acids
- ☐ starch

6. The Benedict's test for reducing sugar must be heated.

- ☐ True ☐ False

7. Proteins contain nitrogen, but carbohydrates and lipids do not.

- ☐ True ☐ False

8. The _____ test turns purple when protein is present.

9. Many glucose units join together to make the storage carbohydrate _____ in plants.

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Answers · 答案

IGCSE Biology

1. amino acids

Proteins are chains of amino acids.

2. blue-black colour

Iodine turns blue-black with starch.

3. carbon, hydrogen and oxygen

Carbohydrates contain C, H and O.

4. brick-red

Benedict's goes blue → brick-red with reducing sugar.

5. glycerol

A lipid is fatty acids joined to glycerol.

6. True

Benedict's needs heating in a water bath; the others are done cold.

7. True

The nitrogen in amino acids distinguishes proteins.

8. Biuret

Biuret detects protein (blue → purple).

9. starch

Plants store glucose as starch; animals store it as glycogen.