

7. The Komodo dragon is a species of lizard.

An investigation was carried out into the effect of environmental temperature on the metabolic rate of a Komodo dragon.

The results are shown in the table.

Environmental temperature (°C)	Oxygen consumption (cm ³ /kg/hr)
20	0.4
25	0.7
30	1.1
35	1.4
40	1.7

- (a) The Komodo dragon is a conformer.

Use evidence from the table to support this statement.

1

- (b) Describe how the investigation could be improved to give more reliable results.

1

- (c) Calculate the average increase in oxygen consumption per °C between 20 °C and 40 °C.

1

Space for calculation

_____ cm³/kg/hr



7. (continued)

- (d) Explain how increasing the environmental temperature leads to an increased metabolic rate in a Komodo dragon.

2

- (e) Name the type of response that allows conformers to tolerate variation in the environmental temperature.

1

- (f) Compare the range of ecological niches that can be occupied by conformers and regulators.

1

[Turn over

