Carnotaurus Scale Drawing for a Cutout

Original tasks 1, 2, 3, 4 / complete keys

Task 1

A hypothetical Carnotaurus body length is 7 metres. Use a scale of 1:35. Calculate the drawing length in centimetres.

Answer: 20 centimetres.

Reason: 7 metres equals 700 centimetres. 700 divided by 35 equals 20 centimetres.

Check: Multiply 20 centimetres by 35 to get 700 centimetres, which equals 7 metres.

Task 2

At a scale of 1:50, a 1-metre scale bar is drawn. Calculate its length in centimetres, then check how many bars equal a 10-centimetre drawing length.

Answer: The bar is 2 centimetres. Five bars equal 10 centimetres.

Reason: 100 centimetres divided by 50 equals 2 centimetres. 10 divided by 2 equals 5.

Check: Multiply 2 centimetres by 5 to get 10 centimetres, matching the drawing length.

Task 3

A drawing length is 24 centimetres at a scale of 1:25. Calculate the hypothetical real body length in metres.

Answer: 6 metres.

Reason: 24 centimetres times 25 equals 600 centimetres. 600 centimetres equals 6 metres.

Check: Divide 600 centimetres by 25 to get 24 centimetres, matching the drawing length.

Task 4

A planned head length is one eighth of a 16-centimetre drawing length. Calculate the head length, then state one measurement you would record to check it.

Answer: 2 centimetres. Record the measured head length in centimetres and compare it with 2 centimetres.

Reason: 16 divided by 8 equals 2 centimetres. The check is a direct measurement of the drawn head.

Check: Measure the head on the drawing with a ruler and subtract 2 centimetres to find the difference.

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Source rubric / reflection

- [ ] Scale ratio is written clearly and units are consistent.
- [ ] Drawing length is calculated correctly from the chosen body length and scale.
- [ ] Outline includes snout, tail, body, head, and two legs, with a closed cut line.
- [ ] Scale bar is labelled and matches the chosen ratio.
- [ ] Blank panel is reserved for an independent scaled drawing.
- [ ] X-height convention is applied from baseline to midline, and any legible letter style is accepted.
- [ ] Measurements are recorded with units and checked against planned values.

Reflection: What did you check, what did you change, and what will you try next?