

68 What's the difference?

- 1 (a), (b), (c) $22 \times 24 = 528$ $23 \times 23 = 529$
(d) 1
- 2 Each time the difference is 1.
- 3 Each time the difference is 4.
- 4 Each time the difference is 9.
- 5 The prediction of 16 should come from recognising the sequence of square numbers in the previous answers.
Several examples should be used to test the prediction.

69 APEC

- 1 Marsh 130 cm Hen 116 cm Montagu's 102 cm
- 2 Rough-legged 1 m 54 cm Honey 1 m 32 cm Common 1 m 20 cm
- 3 (a) Rough-legged buzzard (b) Merlin falcon
- 4 (a) 24 cm
(b) 18 cm
(c) 34 cm
(d) 63 cm
- 5 (a) 64 cm (b) 88 cm
- 6 Answers depend on the child's measurements.

Enclosures

70

- 1 (a) 4 m 10 cm (b) 5 m 31 cm (c) 4 m 15 cm
- 2 (a) 14 m (b) 12 m (c) 13 m 65 cm (d) 7 m 80 cm
- 3 (a) length of side 1 cm 2 cm 3 cm 4 cm
(b) perimeter 4 cm 8 cm 12 cm 16 cm
- 4 (a) 12 m (b) 3 m 20 cm (c) 4 m 80 cm
(d) 10 m 40 cm (e) 16 m 36 cm

Fish scales

71

- 1 Silver Bream 25 cm Anchovy 20 cm
Minnow 15 cm Red Mullet 35 cm
- 2 (a) • tank 1 m 40 cm • fish 40 cm
• rock 80 cm • submarine 10 cm
(b) • tank 60 cm • castle 30 cm
• diver 20 cm • plant 50 cm
(c) The water is more than 40 cm deep. The depth of water in the picture is more than 4 cm which is a true depth of more than 40 cm.
- 3 (a) Great Blue 4 m Nurse 3 m
Crocodile 1 m Mako $4\frac{1}{2}$ m
(b) Mako, Great Blue, Nurse, Crocodile

72 Dinosaurs

- Iguanodon 8 m Brachiosaurus 24 m
Cetiosaurus 18 m
- (a) Brachiosaurus was the longest.
It was about 3 times longer.
(b) Answer depends on the length of the classroom.
(c) A blue whale can be longer than any of these dinosaurs.
- (a) Tyrannosaurus 6 m Iguanodon 5 m
Brachiosaurus 12 m Cetiosaurus 9 m
(b) Brachiosaurus was the tallest.
Answer depends on the height of the classroom.
- (a) • Dino World length 80 m breadth 60 m
• grounds length 180 m breadth 100 m
(b) 10 Cetiosaurus lengths would fit.
(c) Yes, 3 Brachiosaurus lengths would fit.
Three Brachiosaurus lengths are $3 \times 24 \text{ m} = 72 \text{ m}$
which is shorter than the length, 80 metres, of Dino World.

73 Race for APEC

- Practical work.
- Practical work
- (a) 3 km (b) 5 km (c) 10 km (d) 25 km
- 8 km 437 m

Race for APEC – continued

73

- (a) 3 km 960 m (b) 4 km 936 m (c) 6 km 174 m (d) 18 km 258 m
(e) 3 km 55 m (f) 12 km 90 m (g) 5 km 5 m (h) 70 km
- (a) 2350 m (b) 4746 m (c) 11 400 m (d) 3025 m
(e) 15 005 m (f) 500 m (g) 1500 m (h) 3500 m
- Answers depend on children's town.

Routes

74

- (a) 2 km 150 m
(b) 750 m shorter
- (a) 1 km 850 m (b) 1 km
(c) 1 km 220 m (d) 2 km 450 m
- (a) abbey → dunhill → hotel → pier → farm → quarry
(distance 7 km)
(b) 3 km 930 m
- (a) • red route 3 km 75 m • blue route 7 km 632 m
(b) 4 km 557 m longer
- Various routes are possible. One possible route is
park centre → cross → cliff → tower → pond → park centre
(distance 9 km 65 m)