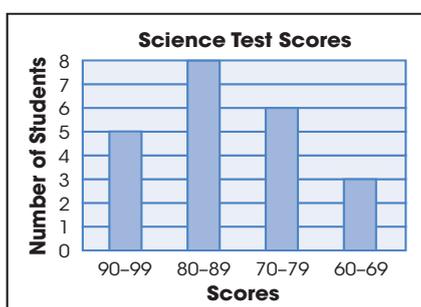


# Learn About

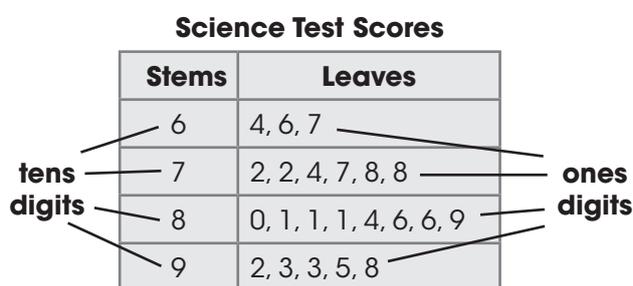
## Interpreting Graphs and Charts: Bar Graphs, Stem-and-Leaf Plots and Scale Maps

A **bar graph** uses numbers and bars to compare amounts. A **stem-and-leaf plot** shows groups of data organised by place value. The bar graph shows that five students scored between 90 and 99. The stem-and-leaf plot shows that these scores are 92, 93, 93, 95 and 98.

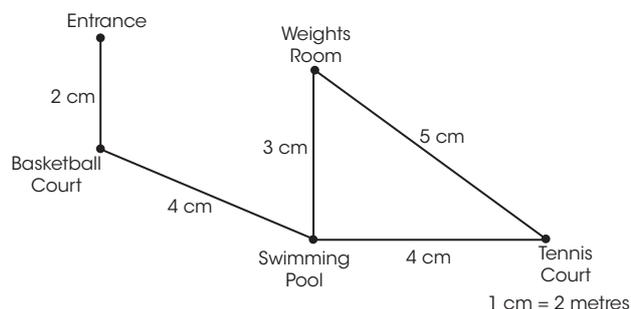
**Bar Graph**



**Stem-and-Leaf Plot**



A **scale map** is a proportional representation of a location. The scale is used to find the distance between points. This scale map shows that the distance between the basketball court and the swimming pool is 8 metres.



Look at the map above. Jaime walked from the swimming pool to the tennis court and then to the weights room. How far did Jaime walk in all?

From the swimming pool to the tennis court: 4 cm

From the tennis court to the weights room: 5 cm

$4 + 5 = 9$ . Each centimetre represents 2 metres, so multiply:  $9 \times 2 = 18$ .

Jaime walked **18 metres** in all.



A **bar graph** uses numbers and bars to compare amounts.  
 A **stem-and-leaf plot** organises data by place value.  
 A **scale map** is a proportional representation of a location.

*Look at the answer choices for each question.  
Read why each answer choice is correct or  
not correct.*

**1. So far, Mr Charles has spent \$500 on the fence. What percentage of the total cost was spent on paint?**

Ⓐ 60%

This is not correct. Mr Charles spent \$60 on paint and \$500 total.  
 $60 \div 500 = 0.12 = 12\%$ , not 60%.

Ⓑ 38%

This is not correct. Mr Charles spent \$60 on paint and \$500 total.  
 $60 \div 500 = 0.12 = 12\%$ , not 38%.

Ⓒ 12%

This is correct. Mr Charles spent \$60 on paint and \$500 total.  
 $60 \div 500 = 0.12 = 12\%$

Ⓓ 8%

This is not correct. Mr Charles spent \$60 on paint and \$500 total.  
 $60 \div 500 = 0.12 = 12\%$ , not 8%.

**2. How much less did Mr Charles spend on paint in Week 1 than in Week 3?**

Ⓐ \$25

This is not correct. Mr Charles spent \$5 in Week 1 and \$25 in Week 3.  
 $\$25 - \$5 = \$20$ , not \$25.

Ⓑ \$20

This is correct. Mr Charles spent \$5 in Week 1 and \$25 in Week 3.  
 $\$25 - \$5 = \$20$

Ⓒ \$15

This is not correct. Mr Charles spent \$5 in Week 1 and \$25 in Week 3.  
 $\$25 - \$5 = \$20$ , not \$15.

Ⓓ \$5

This is not correct. Mr Charles spent \$5 in Week 1 and \$25 in Week 3.  
 $\$25 - \$5 = \$20$ , not \$5.

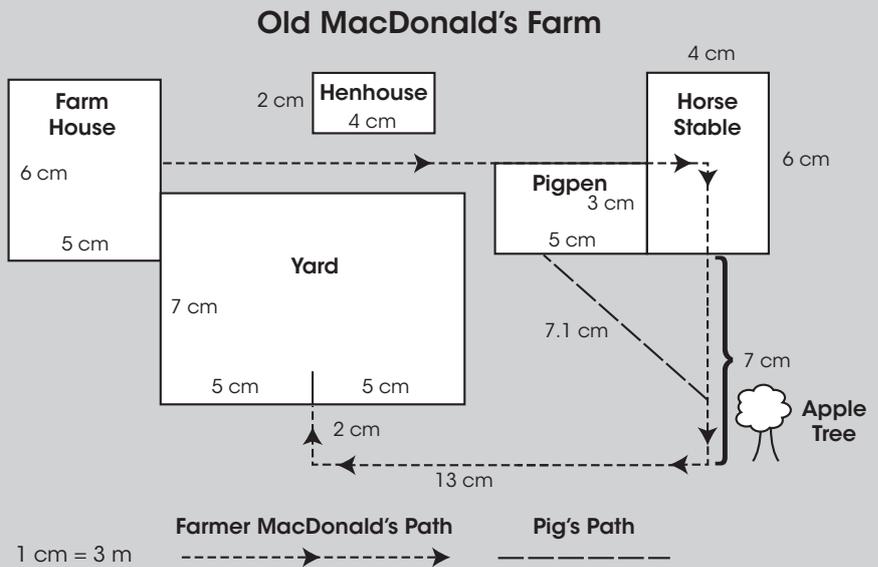
# Lesson

# 4

Read the passage.  
Then do Numbers 1–5.

## Old MacDonald's Farm

Old MacDonald had a farm. On his farm, he had a farmhouse, a large stable with three horses, a pigpen with two friendly pigs, a henhouse with five noisy hens, a small apple orchard and a yard. Every day he checked the henhouse and gathered eggs. He usually led the horses out of the stable and into the yard, and some days he gathered apples in the nearby orchard. The diagram shows the layout of Old MacDonald's farm.



1. If the farmhouse measures 5 centimetres by 6 centimetres on the diagram, what is the distance around the foundation of the farmhouse?

- Ⓐ 66 centimetres
- Ⓑ 22 metres
- Ⓒ 33 metres
- Ⓓ 66 metres

2. On the diagram, the henhouse is 2 centimetres by 4 centimetres, and the pigpen is 3 centimetres by 5 centimetres. How much larger is the perimeter of the real pigpen than the perimeter of the real henhouse?

- Ⓐ 12 centimetres
- Ⓑ 12 metres
- Ⓒ 43 metres
- Ⓓ 48 metres

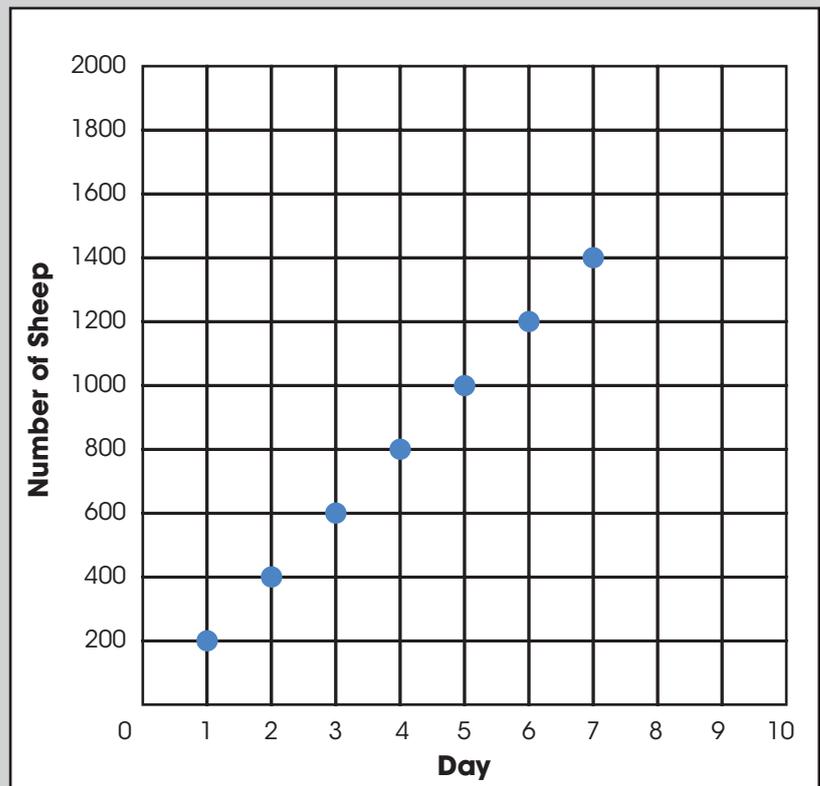
# Lesson 10

Read the passage.  
Then do Numbers 1–5.

## Shearing Sheep

Many sheep in Australia are raised for wool. The job of shearing sheep is very important, but it is also very difficult. Many sheep shearers are injured and develop back problems. Because of these problems, some shearers are seeking new jobs. Australia now has a shortage of sheep shearers.

The coordinate grid shows how many sheep the average shearer can shear in a day.



1. The average sheep shearer can shear 200 sheep a day. At this rate, how many sheep can he or she shear in  $3\frac{1}{2}$  days?

- (A) 300 sheep
- (B) 500 sheep
- (C) 700 sheep
- (D) 900 sheep

2. If one shearer can shear 200 sheep each day, how many sheep can a shearer shear in 9 days?

- (A) 1600 sheep
- (B) 1700 sheep
- (C) 1800 sheep
- (D) 1900 sheep

# Self-Assessment 2

## Lessons 6–10

*Answer these questions after you have completed Lessons 6–10. Before you begin, re-read what you wrote in Self-Assessment 1.*

### **FOCUS on Interpreting Graphs and Charts, Book G**

Name \_\_\_\_\_ Date \_\_\_\_\_

1. Rate your work in Lessons 6–10. Circle your answer.

successful

somewhat successful

needs improvement

2. Did any of the questions give you trouble? \_\_\_\_\_  
If so, what kind of trouble did you have?

Is this the same kind of trouble you had in Lessons 1–5? \_\_\_\_\_

3. Did you find the questions easier or more difficult than those in Lessons 1–5?

Why do you think this is so?

4. Did you meet the goal you set for yourself for Lessons 6–10? \_\_\_\_\_  
Why or why not?

5. What is your goal for Lessons 11–15?

Cut along the dotted line.