An **estimate** is a number that is close to the actual number you are looking for. Numbers can be rounded to the nearest ten, hundred, thousand, ten thousand, and so forth. Numbers can also be rounded to the nearest tenth, hundredth, thousandth, and so forth. If the digit one place to the right of the place being rounded to is 5 or greater, round up. If the digit one place to the right of the place being rounded to is 4 or less, round down.

Look at the number 152.187. Round to the following places:
- Rounded to the nearest *hundred*, the number is 200.
- Rounded to the nearest *ten*, the number is 150.
- Rounded to the nearest *tenth*, the number is 152.2.
- Rounded to the nearest *hundredth*, the number is 152.19.

Patrick wants to buy a new bike. The cost of the bike is $143.52. Round this cost to the nearest ten cents, dollar, ten dollars and hundred dollars.

$143.52 rounded to the nearest ten cents is **$143.50.**
$143.52 rounded to the nearest dollar is **$144.**
$143.52 rounded to the nearest ten dollars is **$140.**
$143.52 rounded to the nearest hundred dollars is **$100.**

Remember:

Numbers can be rounded to the nearest ten, hundred, thousand, ten thousand, and so forth. Numbers can also be rounded to the nearest tenth, hundredth, thousandth, and so forth. If the digit one place to the right of the place being rounded to is 5 or greater, round up. If the digit one place to the right of the place being rounded to is 4 or less, round down.

1. **What is the cost of each pack of swap cards rounded to the nearest ten cents?**

   Ⓐ $1.10

   This answer is not correct. The digit one place to the right of the ten-cents place is 5. Therefore $1.15 rounds up to $1.20.

   ⬤ $1.20

   This answer is correct. The digit one place to the right of the ten-cents place is 5. Therefore $1.15 rounds up to $1.20.

   Ⓒ $1.30

   This answer is not correct. The digit one place to the right of the ten-cents place is 5. Therefore $1.15 rounds up to $1.20.

   Ⓓ $1.40

   This answer is not correct. The digit one place to the right of the ten-cents place is 5. Therefore $1.15 rounds up to $1.20.

2. **Rounding the number of packs to the nearest ten and the cost to the nearest ten cents, about how much will all 12 packs cost?**

   Ⓐ about $11

   This answer is not correct. The number of packs rounds down to 10, and the cost per pack rounds up to $1.20. $1.20 × 10 = $12, not $11.

   ⬤ about $12

   This answer is correct. The number of packs rounds down to 10, and the cost per pack rounds up to $1.20. $1.20 × 10 = $12.

   Ⓒ about $13

   This answer is not correct. The number of packs rounds down to 10, and the cost per pack rounds up to $1.20. $1.20 × 10 = $12, not $13.

   Ⓓ about $14

   This answer is not correct. The number of packs rounds down to 10, and the cost per pack rounds up to $1.20. $1.20 × 10 = $12, not $14.

The West Gate Bridge

The West Gate Bridge opened on 15 November, 1978. Before the bridge was built, cars had to drive much further through busy streets to reach the west of Melbourne. Also, ferries carried people and their cars across the Yarra River to the western suburbs of Melbourne. Since the bridge was completed many thousands of cars drive across it every day.

1. **The West Gate Bridge is 2583 metres long. What is 2583 rounded to the nearest ten?**

   Ⓐ 2500
   Ⓑ 2580
   Ⓒ 2590
   Ⓓ 2600

2. **The West Gate Bridge is 37.35 metres wide. That is 3735 centimetres wide. What is 3735 rounded to the nearest hundred?**

   Ⓐ 3000
   Ⓑ 3600
   Ⓒ 3700
   Ⓓ 3800

Seven Continents

Wendy is learning about the continents. She has learned many facts. There are seven continents. Asia is the largest continent and has the most people. Africa has the most countries. Antarctica is larger than Europe, but hardly any people live there. Australia is the smallest continent. It is the only continent that is an island. Wendy would like to visit South America one day.

1. **The area of North America is 24,256,000 square kilometres. What is the area of North America rounded to the nearest ten thousand?**

   Ⓐ 20,000,000 square kilometres
   Ⓑ 24,000,000 square kilometres
   Ⓒ 24,256,000 square kilometres
   Ⓓ 24,260,000 square kilometres

2. **The area of Africa, rounded to the nearest million, is about 30,000,000 square kilometres. Which of the following numbers, when rounded to the nearest million, is 30,000,000?**

   Ⓐ 30,065,000
   Ⓑ 30,589,113
   Ⓒ 30,702,900
   Ⓓ 30,955,400

Self-Assessment 2
Lessons 6-10

FOCUS on Using Estimation, Book D

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.