100 People

This problem gives you the chance to:
• Calculate using real data and proportion

T1

There are approximately seven billion (7,000,000,000) people in the world.

In the 1990s researchers calculated that if there were just 100 people in the world
  • there would be 20 children
  • 25 people would not have food and shelter
  • 17 people would speak only Chinese
  • 8 would speak only English

1. What fraction of people in the world do not have food and shelter?
   Show your calculation.

   $$\frac{25}{100} = \frac{1}{4}$$

   $\frac{1}{4}$ ✓ 1

   How many people in the world do not have food and shelter?
   Show your calculation.

   $1,750,000,000$ ✓ 1

   4) 7,000 000 000
   4,000,000,000
   3,000,000,000
   3,000,000,000
   0

   1,000,000,000
   750,000,000
   1,750,000,000 ✓

   1

2. How many more people in the world speak Chinese than speak English?
   Show your working.

   $630,000,000$ 1

   $\frac{9}{100}$ 9 ✓   70,000000 • 100 = 7,000,000,00

   9 • 70,000000 = 630,000,000 ✓ 1

3. Approximately three hundred million (300,000,000) people live in the USA.
   In the world of 100 people, how many people would live in the USA?
   Explain how you know.

   4 people ✓ 1

   300,000,000 over 7,000,000,000 equals about
   .0428. If you simplify that you get about 3/70.
   Then you divide 100 by 70 and get 1.42. ✓
   1.42 • 3 = 4.2% round off to 4.

   1

   8

100 People ⑧

100 People

This problem gives you the chance to:
• Calculate using real data and proportion

T2

There are approximately seven billion (7,000,000,000) people in the world.

In the 1990s researchers calculated that if there were just 100 people in the world
- there would be 20 children
- 25 people would not have food and shelter
- 17 people would speak only Chinese
- 8 would speak only English

1. What fraction of people in the world do not have food and shelter?
   Show your calculation.

   $$\frac{25}{100} = \frac{1}{4}$$

   $\underline{\quad 4 \checkmark \quad}$ 1

   How many people in the world do not have food and shelter?
   Show your calculation.

   $175000000 \checkmark$

   $\frac{1}{4} \times 7000\,000\,000$

   175000000 1

2. How many more people in the world speak Chinese than speak English?
   Show your working.

   6446000000 $\overset{\times}{} \; 0$

   $7000000000 - 56000000 = 6440000000$ 0

   $\times$ 0

3. Approximately three hundred million (300,000,000) people live in the USA.
   In the world of 100 people, how many people would live in the USA?
   Explain how you know.

   $\underline{\quad 4 \checkmark \quad}$ 1

   $\underline{300\,000\,000 \div 7000000000 = .04.04 \times 100 =}$
   $\underline{4}$ 1

   $\checkmark$

100 People

⑤

100 People

T3

This problem gives you the chance to:
• Calculate using real data and proportion

There are approximately seven billion (7,000,000,000) people in the world.

In the 1990s researchers calculated that if there were just 100 people in the world
- there would be 20 children
- 25 people would not have food and shelter
- 17 people would speak only Chinese
- 8 would speak only English

1. What fraction of people in the world do not have food and shelter?
Show your calculation.

$$100/25 = 1/4$$

1/4 ✓   1

How many people in the world do not have food and shelter?
Show your calculation.

1,750,000,000 ✓   1

$$7,000,000,000/4 = 1,750,000,000$$ ✓   1

2. How many more people in the world speak Chinese than speak English? 777,777,777 ✗ 0
Show your working.

$$17-8=9$$ ✓
$$7,000,000,000/9 = 777,777,77\ 77$$ ✗

1

0

3. Approximately three hundred million (300,000,000) people live in the USA.
In the world of 100 people, how many people would live in the USA?
Explain how you know.

3,000,000 ✗ 0

$$300,000,000/100 = 3,000,000$$ ✗

0

100 People

4

100 People

This problem gives you the chance to:
• Calculate using real data and proportion

T4

There are approximately seven billion (7,000,000,000) people in the world.

In the 1990s researchers calculated that if there were just 100 people in the world
- there would be 20 children 14 0000000 00 Children
- 25 people would not have food and shelter 175 0000000 people
- 17 people would speak only Chinese 11 90000000 people
- 8 would speak only English 56 00 00000

1. What fraction of people in the world do not have food and shelter?
   Show your calculation.

   $\frac{1}{4}$ ✓   1

   How many people in the world do not have food and shelter?
   Show your calculation.

   ✓   1

   175 0000000

   ^

   0

2. How many more people in the world speak Chinese than speak English?
   Show your working.

   636 0000000 ✓   1

   ```
    7000000000        7 000000000
   ×  .17            ×      .08
   ───────          ──────────
   11 90000000        56 0000000
   - 56 0000000
   ───────────
    630000000
   ```

   1

   ✓   1

3. Approximately three hundred million (300,000,000) people live in the USA.
   In the world of 100 people, how many people would live in the USA?
   Explain how you know.

   ≈23 ×   0

   70 00 000000 ÷ 300 000000 ≈23   ×   0

8

100 People

This problem gives you the chance to:
• Calculate using real data and proportion

T5

There are approximately seven billion (7,000,000,000) people in the world.

In the 1990s researchers calculated that if there were just 100 people in the world
- • there would be 20 children
- • 25 people would not have food and shelter
- • 17 people would speak only Chinese
- • 8 would speak only English

1. What fraction of people in the world do not have food and shelter?
Show your calculation.

$\frac{1}{4}$ people ✓ 1

How many people in the world do not have food and shelter?
Show your calculation.

$\frac{1,750,000,000}{}$ ✓ 1

700    $7000\,000\,000 \div 100 \times 75 =$ 0

$1,750,000,000$

2. How many more people in the world speak Chinese than speak English?
Show your working.

$1190000000 - 560,000,000$ ✓

630000000 ✓ 1
more people. 1

1

3. Approximately three hundred million (300,000,000) people live in the USA.
In the world of 100 people, how many people would live in the USA?
Explain how you know.

3000 0000   ✗ 0

1 divided 3000,000,000 by 100.   ✗ 0

100 People

8

5

100 People

This problem gives you the chance to:
• Calculate using real data and proportion

There are approximately seven billion (7,000,000,000) people in the world.

In the 1990s researchers calculated that if there were just 100 people in the world
- there would be 20 children
- 25 people would not have food and shelter
- 17 people would speak only Chinese
- 8 would speak only English

1. What fraction of people in the world do not have food and shelter?
   Show your calculation.

$\frac{1}{4}$ ✓

2. How many more people in the world speak Chinese than speak English?
   Show your working.

How many people in the world do not have food and shelter?
Show your calculation.

$4\overline{)7,000,000,000}$ ✓

$1,75\ 000\ 0,000$ ✓

$\frac{17}{100} = .17 \qquad \frac{8}{100} = .08$

$.17 \times 7,000,000,000 = 1,190,000,000$
$.08 \times 7,000,000,000 = 560,000,000$

$\begin{array}{r} 1,190,000,000 \\ -\ 560,000,000 \\ \hline 630,000,000 \end{array}$ ✓ ✓

$630,600,000$ ✓
people

.043

3. Approximately three hundred million (300,000,000) people live in the USA.
   In the world of 100 people, how many people would live in the USA?
   Explain how you know.

$\div 7\overset{300,000,000}{000,000,000} = about .043 \quad if\ you$
$multiply\ that\ by\ 100\ you\ get\ about\ 4$ ✓

4 ✓

100 People

8

⑧

100 People

This problem gives you the chance to:
• Calculate using real data and proportion

S2

There are approximately seven billion (7,000,000,000) people in the world.

In the 1990s researchers calculated that if there were just 100 people in the world
- there would be 20 children
- 25 people would not have food and shelter
- 17 people would speak only Chinese
- 8 would speak only English

1. What fraction of people in the world do not have food and shelter?
   Show your calculation.

   $\frac{7\text{billion}}{x} = \frac{100}{25}$ $\frac{100}{100}x = \frac{175}{100}$ $x = 1.75$ billion

   $1.75 \text{billion} \times$
   $\frac{}{7\text{billion}}$ 0

   How many people in the world do not have food and shelter?
   Show your calculation.

   0.25billion 0

   $1.75 / 7 = .25 \text{billion}$ ×

   0

2. How many more people in the world speak Chinese than speak English?
   Show your working.

   0.63billion ✓   1

   $17/100 = x/7$ $8/100 = x/7$ $\begin{array}{r} 1.19 \\ -0.56 \\ \hline 0.63 \end{array}$ ✓

   $\frac{100x = 119}{100 \quad 100}$ $\frac{100x = 56}{100 \quad 100}$
   $\boxed{x = 1.19 \text{billion}}$ $x = 0.56 \text{billion}$ 1

3. Approximately three hundred million (300,000,000) people live in the USA.
   In the world of 100 people, how many people would live in the USA?
   Explain how you know.

   ≈ 4 ✓   1

   $3/7 = x/100$ $x \approx 4.3$
   $\frac{7x = 30}{7 \quad 7}$ ✓   1

       100 People   ⑤

8

100 People

This problem gives you the chance to:
• Calculate using real data and proportion

S3

There are approximately seven billion (7,000,000,000) people in the world.

In the 1990s researchers calculated that if there were just 100 people in the world
- • there would be 20 children
- • 25 people would not have food and shelter
- • 17 people would speak only Chinese
- • 8 would speak only English

1. What fraction of people in the world do not have food and shelter?
   Show your calculation.

$1/4$ ✓   1

How many people in the world do not have food and shelter?
Show your calculation.

$7,000,000,000 / 4$ ✓

$2,250,000,000$ $\overset{\times}{}$ $\overset{0}{}$

1

2. How many more people in the world speak Chinese than speak English?
   Show your working.

$\underset{560\text{mill}}{\text{English}}$ $\underset{12\text{billion}}{\text{Chinese}}$

$\begin{array}{r} 11,920,000,000 \checkmark \\ 560,000,000 \checkmark \\ \hline 11,440000000 \end{array}$

$11,440,000,000$ $\overset{\times}{}$ $\overset{0}{}$

1

1

3. Approximately three hundred million (300,000,000) people live in the USA.
   In the world of 100 people, how many people would live in the USA?
   Explain how you know.

8 × 0

Because If you speak english you could be from U.S.A.   0
$\times$

100 People

$\boxed{4}$

100 People

This problem gives you the chance to:
• Calculate using real data and proportion

S4

There are approximately seven billion (7,000,000,000) people in the world.

In the 1990s researchers calculated that if there were just 100 people in the world
- there would be 20 children
- 25 people would not have food and shelter
- 17 people would speak only Chinese
- 8 would speak only English

1. What fraction of people in the world do not have food and shelter?
Show your calculation.

$$\frac{25}{100} = \frac{1}{4}$$

$\frac{1}{4}$ ✓   1

How many people in the world do not have food and shelter?
Show your calculation.

$$\frac{1}{4} \cdot 7,000,000,000 = 1,750,000,000 ✓$$

1,750,000,000 ✓   1

                                                            1

2. How many more people in the world speak Chinese than speak English?
Show your working.

$\frac{17}{100}$ $\frac{8}{100}$

7,000,000,000 ÷ 100 =
70,000,000 · 8 = 560,000,000
70,000,000 · 17 = 1,190,000,000 ✓✓ ✓

1,190,000,000
− 560,000,000
630,000,000

630,000,000 ✓   1

                  1

                  1

3. Approximately three hundred million (300,000,000) people live in the USA.
In the world of 100 people, how many people would live in the USA?
Explain how you know.

300,000,000 ÷ 100 = 30,000,000 ✗

30,000,000 ✗ 0
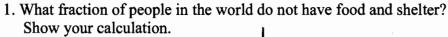
                  0

100 People 6

100 People

This problem gives you the chance to:
• Calculate using real data and proportion

There are approximately seven billion (7,000,000,000) people in the world.

In the 1990s researchers calculated that if there were just 100 people in the world
- there would be 20 children
- 25 people would not have food and shelter
- 17 people would speak only Chinese
- 8 would speak only English

1. What fraction of people in the world do not have food and shelter?
   Show your calculation.

   $$100 \div 25 = 4 = \frac{1}{4}$$

   $\frac{1}{4}$ of them ✓ |

   How many people in the world do not have food and shelter?
   Show your calculation.

   1750000000 ✓ |

   $$7,000,000,000 \div 4 = 1750000000 ✓$$ |

2. How many more people in the world speak Chinese than speak English?
   Show your working.

   324264705.9 ✗   0

   $$411764705.9 \quad ✗$$
   $$87500000.0 \quad ✗$$
   $$\overline{}$$
   $$324264170S.9$$ 0

3. Approximately three hundred million (300,000,000) people live in the USA.
   In the world of 100 people, how many people would live in the USA?
   Explain how you know.

   23 people ✗   0

   $$7000000000 \div 300000000 = 23.\overline{3} = 23 ✗$$ 0

③

100 People

This problem gives you the chance to:
• Calculate using real data and proportion

S6

There are approximately seven billion (7,000,000,000) people in the world.

In the 1990s researchers calculated that if there were just 100 people in the world
- there would be 20 children
- 25 people would not have food and shelter
- 17 people would speak only Chinese
- 8 would speak only English

1. What fraction of people in the world do not have food and shelter?
   Show your calculation.

   _25%_ ✓ 1

   $25 \div 100 \times 100 = 25$

   How many people in the world do not have food and shelter?
   Show your calculation.

   1̶7̶5̶0̶0̶0̶0̶0̶0̶ ˣ 0

   $7000000000 \div 100 \times 25$ ✓

   1

2. How many more people in the world speak Chinese than speak English?
   Show your working.

   _9%_ ˣ 0

   1

   $17 - 8 = 9 \div 100 \times 100 = 9$ ✓

   Λ

3. Approximately three hundred million (300,000,000) people live in the USA.
   In the world of 100 people, how many people would live in the USA?
   Explain how you know.

   4 ✓ 1
   people

   Because I toke off all the zeros on three hundred million and got three then all but 1 zero on seven billion and got seventy then divided seventy by three and multiplied the answer by 100 and got 4. ✓
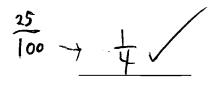
   8

100 People ⑤

100 People

This problem gives you the chance to:
• Calculate using real data and proportion

There are approximately seven billion (7,000,000,000) people in the world.

In the 1990s researchers calculated that if there were just 100 people in the world
- there would be 20 children
- 25 people would not have food and shelter
- 17 people would speak only Chinese
- 8 would speak only English

1. What fraction of people in the world do not have food and shelter?
   Show your calculation.

$$\frac{25}{100} \rightarrow \frac{1}{4} \checkmark$$

   How many people in the world do not have food and shelter?
   Show your calculation.

$$25 \cdot 70,000,000 \checkmark$$

$$175000000 \checkmark$$

2. How many more people in the world speak Chinese than speak English?
   Show your working.

   134000000×0

$$17 \cdot 70,000,000 = 1190000000$$
$$8 \cdot 70,000,000 = 560000000$$
$$\overline{1340000000}$$

3. Approximately three hundred million (300,000,000) people live in the USA.
   In the world of 100 people, how many people would live in the USA?   4 people ✓
   Explain how you know.

   I know because 300,000,000 ÷ 7,000,000,000 = about 0.04
   people. Then I multiplied by 100.

8

100 People

This problem gives you the chance to:
• Calculate using real data and proportion

S8

There are approximately seven billion (7,000,000,000) people in the world.

In the 1990s researchers calculated that if there were just 100 people in the world
- there would be 20 children
- 25 people would not have food and shelter
- 17 people would speak only Chinese
- 8 would speak only English

1. What fraction of people in the world do not have food and shelter?
   Show your calculation.

   $25/100$, or $1/4$

   $\dfrac{1}{4}$ ✓ 1

   How many people in the world do not have food and shelter?
   Show your calculation.

   ✓ 1
   1,750,000,000

   $1/4 \times 7,000,000,000$ ✓

2. How many more people in the world speak Chinese than speak English?
   Show your working.

   $\begin{array}{r} \times 7 \\ -8 \\ \hline 9 \end{array}$ ✓ $\wedge$

   1

   9 × 0

   1
   0

3. Approximately three hundred million (300,000,000) people live in the USA.
   In the world of 100 people, how many people would live in the USA?
   Explain how you know.

   ≈14 × 0

   These are like 7 continents so you
   would divide 100 by 7.   × 0

8

100 People

This problem gives you the chance to:
• Calculate using real data and proportion

S9

There are approximately seven billion (7,000,000,000) people in the world.   *7,009,000*

In the 1990s researchers calculated that if there were just 100 people in the world
• there would be 20 children $\frac{25}{100} = 25\%$ 7,000,000,000
• 25 people would not have food and shelter $\div 4$
• 17 people would speak only Chinese
• 8 would speak only English   1,759,000,000

$$\frac{175,000,000}{7,000,000,000}$$

1. What fraction of people in the world do not have food and shelter?
   Show your calculation.

   How many people in the world do not have food and shelter?
   Show your calculation. $\frac{25}{100} = 25\%$ $\frac{7,000,000,000}{\div 4}$

   1,750,000,000

   1,750,000,000

2. How many more people in the world speak Chinese than speak English?
   Show your working.   630,000,000

   $\frac{17}{100} \cdot \frac{7,000,000}{7,000,000,000}$ 1,190,000,000

   $\frac{8}{100} \cdot \frac{7,000,000}{7,000,000,000}$ 560,000,000

   1,190,000,000
   − 560,000,000
   630,000,000

3. Approximately three hundred million (300,000,000) people live in the USA.
   In the world of 100 people, how many people would live in the USA? $\frac{67}{33}$ **X** 33 people
   Explain how you know.

   You take the 7,000,000,000 people in the world
   subtract by 300,000,000 equals 6,700,000,000 = 67%
   100% − 67% = 33%   **X**   0

8

100 People ⑥

100 People

This problem gives you the chance to:
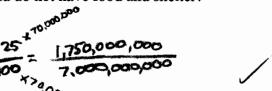• Calculate using real data and proportion

S10

There are approximately seven billion (7,000,000,000) people in the world.

In the 1990s researchers calculated that if there were just 100 people in the world
- • there would be 20 children
- • 25 people would not have food and shelter
- • 17 people would speak only Chinese
- • 8 would speak only English

1. What fraction of people in the world do not have food and shelter?
   Show your calculation.

   $\frac{25 \div 25}{100 \div 25} = \frac{1}{4}$

   $\frac{1}{4}$ ✓ |

   How many people in the world do not have food and shelter?
   Show your calculation.

   $\frac{25^{\times 70,000,000}}{100_{\times 70,000,000}} = \frac{1,750,000,000}{7,000,000,000}$ ✓
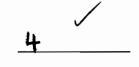
   1,750,000,000 ✓ |
   (1.75 bill.)

   |

2. How many more people in the world speak Chinese than speak English?
   Show your working.

   $17 - 8 = 9$ ✓

   $1\% = 70$ mill.
   $9\% = 630$ mill. ✓

   630,000,000 ✓ |
   (630 mill.)

   |

   |

   |

3. Approximately three hundred million (300,000,000) people live in the USA.
   In the world of 100 people, how many people would live in the USA?
   Explain how you know.

   ✓ |
   4

   If there were 700 people, 30 would live in the U.S. 3% ≈ 43. |

   I think it would mean 4 people live in the U.S. and 1

   person has a summer home in the U.S.

100 People

⑧