Lesson 1

Display ERS Lesson 1 and 1 m ruler, or display Colour Masters (see page xiv) and 1 m ruler.

1 Refer to ERS Question 1 or Colour Master.

**SNAPSHOT**

\[
\begin{array}{c}
5 & 6 & 4 \\
+ & 2 & 1 & 2 \\
\hline
7 & 6 \\
\end{array}
\]

With column problems like this, the digits must be lined up.
Start with the ones column: **FOUR** add **TWO** equals **SIX**.
Add the tens column: **SIX** add **ONE** equals **SEVEN**.
Finally add the **HUNDREDS COLUMN**.
The **sum** is the total after you add.

**QUESTION 1** Find the sum of 564 and 212. *(Repeat question)*
Write your answer in today’s column next to question 1.

2 Refer to ERS Question 2 or Colour Master.

**SNAPSHOT**

\[
\begin{array}{c}
5 & 6 & 4 \\
- & 2 & 1 & 2 \\
\hline
5 & 2 \\
\end{array}
\]

With column problems like this, the digits must be lined up.
Start with the ones column: **FOUR** minus **TWO** equals **TWO**.
Subtract the tens column: **SIX** minus **ONE** equals **FIVE**.
Finally subtract the hundreds column.

**QUESTION 2** 564 minus 212. *(Repeat question)*
Write your answer in today’s column next to question 2.

3 Refer to ERS Question 3 or Colour Master.

**SNAPSHOT**

\[
\begin{array}{c}
4 & 3 \\
\times & 2 \\
\hline
6 \\
\end{array}
\]

This is another column problem so keep the digits lined up.
Start with the ones column: **TWO** multiplied by **THREE** equals **SIX**.
Next, multiply the tens column: **TWO** by **FOUR**.

**QUESTION 3** Multiply 43 by 2. *(Repeat question)*
Write your answer in today’s column next to question 3.

4 Refer to ERS Question 4 or Colour Master.

**SNAPSHOT**

\[
\begin{array}{c}
3 & 2 \\
\div & 3 & \underline{9} & 6 \\
\end{array}
\]

This division is **NINETY-SIX** divided by **THREE**.
The first problem is **NINE** tens divided by **THREE**.
That’s **THREE**.
The first digit of the answer, three, goes above **NINE**.
The next problem is **SIX** divided by **THREE**.
That’s **TWO**. The last digit of the answer, two, goes above **SIX**.

**QUESTION 4** 96 divided by 3. *(Repeat question)*
Write your answer in today’s column next to question 4.
5 Display ERS Question 5. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

When counting in 2s the first five numbers are 2, 4, 6, 8, 10.

**QUESTION 5** When counting in 2s what number comes just after 4? (Repeat question)

6 Refer to ERS Question 6 or Colour Master.

**SNAPSHOT**

4 × ? = 8

The multiplication problem is **FOUR MULTIPLIED BY SOME NUMBER EQUALS EIGHT**.

**QUESTION 6** Write the missing number. (Repeat question)

7 Refer to ERS Question 7 or Colour Master.

**SNAPSHOT**

6 × 10 = 60

19 × 10 = 190

Counting numbers from zero to infinity are called **whole** numbers.

1, 2, 3, 4 are whole numbers.

When you multiply a whole number by 10, the last digit of the answer is always zero.

**SIX BY TEN EQUALS SIXTY.**

The last digit of the answer is **ZERO**.

**NINETEEN BY TEN EQUALS ONE HUNDRED AND NINETY.**

The last digit of the answer is **ZERO**.

**QUESTION 7** Multiply 4 by 10. (Repeat question)

8 Refer to ERS Question 8 or Colour Master.

**SNAPSHOT**

The **FIRST CIRCLE** is a whole unit.

The **NEXT CIRCLE** is a whole unit.

**QUESTION 8** How many whole units altogether? (Repeat question)

9 Refer to ERS Question 9 or Colour Master.

**SNAPSHOT**

The number before the decimal point, **FOUR**, is a whole number.

The number after the decimal point, **FIVE**, tells about parts.

One digit after the decimal point represents **tenths**.

I read this decimal as **FOUR and FIVE-TENTHS**.

I say ‘and’ for the **DECIMAL POINT**.

**FOUR AND FIVE-TENTHS**.

**QUESTION 9** Write the decimal number 6 and 5-tenths. (Repeat question)

10 Refer to ERS Question 10 and 1 m ruler, or Colour Master and 1 m ruler.

**SNAPSHOT**

A **metre** is a basic unit of length.

This **RULER** is 1 metre in length.

A **SMALL M** is the sign for metre.

**QUESTION 10** If I place two rulers end to end, what will be their total length in metres? (Repeat question)

Label your answer with the metre sign.
11 Refer to ERS Question 11 or Colour Master.

**SNAPSHOT**
- polygon

**POLY** means many; **GON** means angle.

A **POLYGON** is a closed shape with three or more angles and straight sides.

A **closed** shape means all sides connect.

**SQUARES** and **TRIANGLES** are **POLYGONS**.

**QUESTION 11** Write the word that describes any closed shape with three or more angles and straight sides. *(Repeat question)*

12 Refer to ERS Question 12 or Colour Master.

**SNAPSHOT**
- F N Y X Z

Lines that are always the same distance apart are called **parallel**.

The **HORIZONTAL LINES** in the **LETTER F** are parallel and will never meet.

**QUESTION 12** Which of the letters **N**, **Y**, **X** or **Z** have a pair of parallel lines? *(Repeat question)*

13 Refer to ERS Question 13 or Colour Master.

**SNAPSHOT**
- part A
- part B

The **average** tells how many there would be in each part if the total sum were evenly shared.

**PART A** is one part and **PART B** is the other part.

**QUESTION 13** How many parts altogether? *(Repeat question)*

14 Display ERS Question 14. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. **Colour Master not required.**

The **sum** is the total after addition.

**QUESTION 14** Find the sum of 3, 4 and 1. *(Repeat question)*

15 Refer to ERS Question 15 or Colour Master.

**SNAPSHOT**
- $5.01
- $5.99

This is **FIVE DOLLARS AND ONE CENT**.

You write a **DECIMAL POINT** for the word ‘and’.

This is **FIVE DOLLARS AND NINETY-NINE CENTS**.

**QUESTION 15** Write in **digits** 5 dollars and 25 cents. *(Repeat question)*

16 Refer to ERS Question 16 or Colour Master.

**SNAPSHOT**
- 4:00 a.m.

There are 24 hours in one day.

The first 12 hours are from midnight until noon.

This time is called a.m. in its shortened form.

This is **FOUR O’CLOCK** in the morning, or 4:00 a.m.

**QUESTION 16** Write 2 o’clock in the morning in its shortened form. *(Repeat question)*

17 Display ERS Question 17. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. **Colour Master not required.**

**QUESTION 17** Multiply 2 by itself, then take 1 from your answer. *(Repeat question)*
18  Refer to ERS Question 18 or Colour Master.
SNAPSHOT

QUESTION 18  The TOP SHAPE is one rectangle. How many rectangles of any size are in the BOTTOM SHAPE? (Repeat question)

19  Refer to ERS Question 19 or Colour Master.
SNAPSHOT

Springville Infant School  

<table>
<thead>
<tr>
<th></th>
<th>Grade three</th>
<th>Grade two</th>
<th>Grade one</th>
<th>Total</th>
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<td>Girls</td>
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<tr>
<td>Total</td>
<td>26</td>
<td>24</td>
<td>26</td>
<td>76</td>
</tr>
</tbody>
</table>

This table tells about the number of GIRLS and BOYS in each class at Springville Infant School. Look at the GRADE TWO COLUMN. The FIRST NUMBER tells how many girls are in Grade two.

QUESTION 19  How many girls are in Grade two? (Repeat question)

20  Display ERS Question 20. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

QUESTION 20  Find the least number of cuts needed to cut a log into five equal pieces. (Repeat question)

Correct all questions.

DEBUG directly after corrections.

<table>
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<tr>
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<td>1.9 6.5</td>
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<td>1.10 2 m</td>
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<td>1.11 Polygon</td>
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<tr>
<td>1.12 N, Z</td>
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<tr>
<td>1.13 2</td>
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<td>1.14 8</td>
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<td>1.15 $5.25</td>
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<tr>
<td>1.18 3</td>
</tr>
<tr>
<td>1.19 11</td>
</tr>
<tr>
<td>1.20 4</td>
</tr>
</tbody>
</table>

LESSON 1  5
Lesson 2

Display ERS Lesson 2 and 1 m ruler, or display Colour Masters (see page xiv) and 1 m ruler.

1 Refer to ERS Question 1 or Colour Master.

SNAPSHOT

\[
\begin{align*}
4 & \quad 3 & \quad 2 \\
+ & \quad 2 & \quad 1 & \quad 1 \\
\hline
\quad 4 & \quad 3 \\
\end{align*}
\]

With column problems like this, the digits must be lined up.

Start with the ones column:
TWO add ONE equals THREE.

Add the tens column: THREE add ONE equals FOUR.

Finally add the hundreds column.
The sum is the total after you add.

QUESTION 1 Find the sum of 432 and 211. (Repeat question)
Write your answer in today’s column next to question 1.

2 Refer to ERS Question 2 or Colour Master.

SNAPSHOT

\[
\begin{align*}
4 & \quad 3 & \quad 2 \\
- & \quad 2 & \quad 1 & \quad 1 \\
\hline
\quad 2 & \quad 1 \\
\end{align*}
\]

With column problems like this, the digits must be lined up.

Start with the ones column:
TWO minus ONE equals ONE.

Subtract the tens column: THREE minus ONE equals TWO.

Finally subtract the hundreds column.

QUESTION 2 432 minus 211. (Repeat question)
Write your answer in today’s column next to question 2.

3 Refer to ERS Question 3 or Colour Master.

SNAPSHOT

\[
\begin{align*}
2 & \quad 1 \\
\times & \quad 4 \\
\hline
\quad 4 \\
\end{align*}
\]

This is another column problem so keep the digits lined up.

Start with the ones column:
FOUR multiplied by ONE equals FOUR.

Next, multiply the tens column: FOUR by TWO.

QUESTION 3 Multiply 21 by 4. (Repeat question)
Write your answer in today’s column next to question 3.

4 Refer to ERS Question 4 or Colour Master.

SNAPSHOT

\[
\begin{align*}
3 & \quad 2 \\
\div & \quad 3 & \quad 9 & \quad 6 \\
\hline
\end{align*}
\]

This division is NINETY-SIX divided by THREE.

The first problem is NINE tens divided by THREE.

That’s THREE.

The first digit of the answer, three, goes above NINE.

The next problem is SIX divided by THREE.

That’s TWO.

The last digit of the answer, two, goes above SIX.

QUESTION 4 84 divided by 2. (Repeat question)
5 Display ERS Question 5. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

When counting in 2s the first ten numbers are 2, 4, 6, 8, 10 pause 12, 14, 16, 18, 20.

**QUESTION 5** When counting in 2s what number comes just before 18? (Repeat question)

6 Refer to ERS Question 6 or Colour Master.

**SNAPSHOT**

\[ 2 \times \_ = 8 \]

The multiplication problem is **TWO MULTIPLIED BY SOME NUMBER EQUALS EIGHT.**

**QUESTION 6** Write the missing number. (Repeat question)

7 Refer to ERS Question 7 or Colour Master.

**SNAPSHOT**

\[ 6 \times 10 = 60 \]
\[ 19 \times 10 = 190 \]

Counting numbers from zero to infinity are called **whole numbers.**

10, 11, 12, 13 are whole numbers.

When you multiply a whole number by ten, the last digit of the answer is always zero.

**SIX BY TEN EQUALS SIXTY.**

The last digit of the answer is **ZERO.**

**NINETEEN BY TEN EQUALS ONE HUNDRED AND NINETY.**

The last digit of the answer is **ZERO.**

**QUESTION 7** Multiply 47 by 10. (Repeat question)

8 Refer to ERS Question 8 or Colour Master.

**SNAPSHOT**

The **FIRST CIRCLE** is a whole unit.

The **NEXT CIRCLE** is a whole unit.

There are two equal parts in the **FIRST WHOLE UNIT.**

There are two equal parts in the **NEXT WHOLE UNIT.**

All four parts are equal.

**QUESTION 8** How many equal parts in each whole unit? (Repeat question)

9 Refer to ERS Question 9 or Colour Master.

**SNAPSHOT**

4.2

The number before the decimal point, **FOUR,** is a whole number.

The number after the decimal point, **TWO,** tells about parts.

One digit after the decimal point represents **tenth**s.

I read this decimal as **FOUR and TWO-TENTHS.**

I say ‘and’ for the **DECIMAL POINT.**

**FOUR AND TWO-TENTHS.**

**QUESTION 9** Write the decimal number 8 and 2-tenths. (Repeat question)
10 Refer to ERS Question 10 and 1 m ruler, or Colour Master and 1 m ruler.

**SNAPSHOT**

```
\[\begin{array}{c}
0 \\
100 \text{ cm}
\end{array}\]
```

Not to scale

A **centimetre** is a unit of length.

This **ruler** is 100 centimetres in length.

A **small cm** is the sign for centimetre.

**QUESTION 10** If I place two rulers end to end, what will be their total length in centimetres? *(Repeat question)*

Label your answer with the centimetre sign.

11 Refer to ERS Question 11 or Colour Master.

**SNAPSHOT**

```
POLY
```

**polygon**

POLY means many; **gon** means angle.

A **polygon** is a closed shape with three or more angles and straight sides.

A **closed** shape means all sides connect.

**QUESTION 11** True or false: a **square** is a closed shape. *(Repeat question)*

12 Refer to ERS Question 12 or Colour Master.

**SNAPSHOT**

```
F E H Z
```

Lines that are always the same distance apart are called **parallel**.

All the **letters** F, E, H and Z have at least one pair of parallel lines.

**QUESTION 12** Which letter has the most parallel lines? *(Repeat question)*

13 Refer to ERS Question 13 or Colour Master.

**SNAPSHOT**

```
\[\begin{array}{c}
\square \\
\square
\end{array}\]
```

part A  part B

The **average** tells how many there would be in each part if the total sum were evenly shared.

**PART A** is one part and **PART B** is the other part.

To find the average number of squares, first find the total sum of the parts.

That’s **ONE SQUARE PLUS THREE**.

**QUESTION 13** Find the total sum of the parts. *(Repeat question)*

14 Display ERS Question 14. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

The **sum** is the total after addition.

**QUESTION 14** Find the sum of 6, 1 and 2. *(Repeat question)*

15 Refer to ERS Question 15 or Colour Master.

**SNAPSHOT**

```
$5.01  \quad $5.99
```

This is **FIVE DOLLARS AND ONE CENT**.

You write a **decimal point** for the word ‘and’.

This is **FIVE DOLLARS AND NINETY-NINE CENTS**.

**QUESTION 15** Write in **digits** 5 dollars and 5 cents. *(Repeat question)*
16  Refer to ERS Question 16 or Colour Master.

SNAPSHOT

4:00 a.m.

There are 24 hours in one day.
The first 12 hours are from midnight until noon.
This time is called a.m. in its shortened form.
This is **FOUR O’CLOCK** in the morning, or 4:00 a.m.

**QUESTION 16** Write 10 o’clock in the morning in its shortened form. *(Repeat question)*

17  Display ERS Question 17. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

**QUESTION 17** Multiply 2 by itself, then add 3 to your answer. *(Repeat question)*

18  Refer to ERS Question 18 or Colour Master.

SNAPSHOT

**QUESTION 18** The **TOP SHAPE** is one rectangle.
How many rectangles of any size are in the **BOTTOM SHAPE**? *(Repeat question)*

19  Refer to ERS Question 19 or Colour Master.

SNAPSHOT

### Springville Infant School

<table>
<thead>
<tr>
<th></th>
<th>Grade three</th>
<th>Grade two</th>
<th>Grade one</th>
<th>Total</th>
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<td>26</td>
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</tbody>
</table>

This table tells about the number of **GIRLS** and **BOYS** in each class at Springville Infant School.
Look at the **GRADE TWO COLUMN**.
The **SECOND NUMBER** tells how many boys are in Grade two.

**QUESTION 19** How many boys are in Grade two? *(Repeat question)*

20  Display ERS Question 20. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

**QUESTION 20** Find the **least** number of cuts needed to cut a log into three equal pieces. *(Repeat question)*

**Correct all questions.**

**DEBUG directly after corrections.**

### ANSWER KEY

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LESSON 2 9
Lesson 3

Display ERS Lesson 3 and 1 m ruler, or display Colour Masters (see page xiv) and 1 m ruler.

1. Refer to ERS Question 1 or Colour Master.

**SNAPSHOT**

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<th>+ 2 2 1</th>
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<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
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With column problems like this, the digits must be lined up.

Start with the ones column:
TWO add ONE equals THREE.

**QUESTION 1** Find the sum of 232 and 221. *(Repeat question)*
Write your answer in today’s column next to question 1.

2. Refer to ERS Question 2 or Colour Master.

**SNAPSHOT**

<table>
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<tr>
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<tbody>
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<td></td>
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<td>1</td>
<td></td>
</tr>
</tbody>
</table>

With column problems like this, the digits must be lined up.

Start with the ones column:
TWO minus ONE equals ONE.

**QUESTION 2** 232 minus 221. *(Repeat question)*
Write your answer in today’s column next to question 2.

3. Refer to ERS Question 3 or Colour Master.

**SNAPSHOT**

<table>
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<th>\times 2</th>
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</thead>
<tbody>
<tr>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

This is another column problem so keep the digits lined up.

Start with the ones column:
TWO multiplied by FOUR equals EIGHT.

Next, multiply the tens column: TWO by THREE.

**QUESTION 3** Multiply 34 by 2. *(Repeat question)*

4. Refer to ERS Question 4 or Colour Master.

**SNAPSHOT**

<table>
<thead>
<tr>
<th>3</th>
<th>9 6</th>
</tr>
</thead>
</table>

This division is NINETY-SIX divided by THREE.
The first problem is NINE tens divided by THREE.
That’s THREE.
The first digit of the answer, three, goes above NINE.
The next problem is SIX divided by THREE. That’s two.
The last digit of the answer, two, goes above SIX.

**QUESTION 4** 96 divided by 3. *(Repeat question)*

5. Display ERS Question 5. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

When counting in 2s the first ten numbers are 2, 4, 6, 8, 10 pause 12, 14, 16, 18, 20.

**QUESTION 5** When counting in 2s what number comes just after 18? *(Repeat question)*
6 Refer to ERS Question 6 or Colour Master.

**SNAPSHOT**

\[ 5 \times ? = 10 \]

The multiplication problem is **FIVE MULTIPLIED BY SOME NUMBER EQUALS TEN**.

**QUESTION 6** Write the missing number. *(Repeat question)*

7 Refer to ERS Question 7 or Colour Master.

**SNAPSHOT**

\[ 6 \times 10 = 60 \]
\[ 19 \times 10 = 190 \]

Counting numbers from zero to infinity are called **whole** numbers.
62, 63, 64 are whole numbers.
When you multiply a whole number by ten, the last digit of the answer is always zero.
**SIX BY TEN EQUALS SIXTY.**
The last digit of the answer is **ZERO**.
**NINETEEN BY TEN EQUALS ONE HUNDRED AND NINETY.**
The last digit of the answer is **ZERO**.

**QUESTION 7** Multiply 64 by 10. *(Repeat question)*

8 Refer to ERS Question 8 or Colour Master.

**SNAPSHOT**

\[ \frac{4}{2} \]

Fractions tell how many equal parts in each whole unit and how many are used.
The bottom number, **TWO**, tells how many equal parts in each whole unit.
There are **TWO** equal parts in each whole unit.
The used parts are **SHADE**.D.
The top number, **FOUR**, tells how many parts are used.
There are **FOUR** parts used.

**QUESTION 8** Write the fraction for this picture. *(Repeat question)*

9 Refer to ERS Question 9 or Colour Master.

**SNAPSHOT**

12.5

The number before the decimal point, **TWELVE**, is a whole number.
The number after the decimal point, **FIVE**, tells about parts.
One digit after the decimal point represents **tenths**.
I read this decimal as **TWELVE** and **FIVE-TENTHS**.
I say ‘and’ for the **DECIMAL POINT**.
**TWELVE AND FIVE-TENTHS.**

**QUESTION 9** Write the decimal number 12 and 2-tenths. *(Repeat question)*

10 Refer to ERS Question 10 and 1 m ruler, or Colour Master and 1 m ruler.

**SNAPSHOT**

Not to scale

**QUESTION 10** If I place three **RULERS** end to end, what will be their total length in centimetres? *(Repeat question)*

Label your answer with the centimetre sign.

11 Refer to ERS Question 11 or Colour Master.

**SNAPSHOT**

**polygon**

**POLY** means many; **GON** means angle.
A **POLYGON** is a closed shape with three or more angles and straight sides.
A **closed** shape means all sides connect.

**QUESTION 11** True or false: a square is a **POLYGON**. *(Repeat question)*
12 Refer to ERS Question 12 or Colour Master.

**SNAPSHOT**

T

Lines that are always the same distance apart are called **parallel**.

Parallel lines will never meet.

**QUESTION 12** How many parallel lines in the letter T? (Repeat question)

---

13 Refer to ERS Question 13 or Colour Master.

**SNAPSHOT**

<table>
<thead>
<tr>
<th></th>
<th>part A</th>
<th></th>
<th>part B</th>
</tr>
</thead>
</table>

The **average** tells how many there would be in each part if the total sum were evenly shared.

**PART A** is one part and **PART B** is the other part.

To find the average number of squares, first find the total sum of the parts.

That's **ONE SQUARE PLUS THREE**.

Divide the total sum, 4, by the number of parts.

**QUESTION 13** Divide the total sum 4, by the number of parts. (Repeat question)

---

14 Display ERS Question 14. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

The **sum** is the total after addition.

**QUESTION 14** Find the sum of 2, 4 and 3. (Repeat question)

---

15 Display ERS Question 15. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

**QUESTION 15** Write in **digits** 5 dollars and 50 cents. (Repeat question)

---

16 Display ERS Question 16. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

Midnight until noon are the first 12 hours. This time is called a.m. in its shortened form.

**QUESTION 16** Write 11 o’clock in the morning in its shortened form. (Repeat question)

---

17 Display ERS Question 17. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

**QUESTION 17** Multiply 2 by itself, then take 3 from your answer. (Repeat question)

---

18 Refer to ERS Question 18 or Colour Master.

**SNAPSHOT**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>

**QUESTION 18** The **TOP SHAPE** is one rectangle. How many rectangles of any size are in the **BOTTOM SHAPE**? (Repeat question)

---

19 Refer to ERS Question 19 or Colour Master.

**SNAPSHOT**

<table>
<thead>
<tr>
<th></th>
<th>Grade three</th>
<th>Grade two</th>
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<th>Total</th>
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<tbody>
<tr>
<td>Girls</td>
<td>16</td>
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<td>12</td>
<td>39</td>
</tr>
<tr>
<td>Boys</td>
<td>10</td>
<td>13</td>
<td>14</td>
<td>37</td>
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<tr>
<td>Total</td>
<td>26</td>
<td>24</td>
<td>26</td>
<td>76</td>
</tr>
</tbody>
</table>

This table tells about the number of **GIRLS** and **BOYS** in each class at Springville Infant School.

Look at the **GRADE TWO COLUMN**.

The **THIRD NUMBER** tells the **total** number of students in Grade two.

**QUESTION 19** What is the total number of students in Grade two? (Repeat question)

---
20 Display ERS Question 20. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

**QUESTION 20** Find the least number of cuts needed to cut a log into seven equal pieces. (Repeat question)

**Correct all questions.**

**DEBUG directly after corrections.**

<table>
<thead>
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<th>ANSWER KEY</th>
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<tr>
<td>3.2 11</td>
</tr>
<tr>
<td>3.3 68</td>
</tr>
<tr>
<td>3.4 32</td>
</tr>
<tr>
<td>3.5 20</td>
</tr>
<tr>
<td>3.6 2</td>
</tr>
<tr>
<td>3.7 640</td>
</tr>
<tr>
<td>3.8 4(\frac{1}{2})</td>
</tr>
<tr>
<td>3.9 12.2</td>
</tr>
<tr>
<td>3.10 300 cm</td>
</tr>
</tbody>
</table>

3.11 True
3.12 0
3.13 2
3.14 9
3.15 $5.50$
3.16 11:00 a.m.
3.17 1
3.18 6
3.19 24
3.20 6
Lesson 4

Display ERS Lesson 4 and 1 m ruler, or display Colour Masters (see page xiv) and 1 m ruler.

1  Refer to ERS Question 1 or Colour Master.

**SNAPSHOT**

5 2 4 + 2 1 3

**QUESTION 1** Find the **sum** of **FIVE HUNDRED AND TWENTY-FOUR** and **TWO HUNDRED AND THIRTEEN**. (Repeat question)
Write your answer in today’s column next to question 1.

2  Refer to ERS Question 2 or Colour Master.

**SNAPSHOT**

5 2 4 − 2 1 3

**QUESTION 2** **FIVE HUNDRED AND TWENTY-FOUR** minus **TWO HUNDRED AND THIRTEEN**. (Repeat question)

3  Refer to ERS Question 3 or Colour Master.

**SNAPSHOT**

4 3 × 2

6

This is a column problem so keep the digits lined up.
Start with the ones column: **TWO** multiplied by **THREE** equals **SIX**.
Next, multiply the tens column.

**QUESTION 3** Multiply 43 by 2. (Repeat question)

4  Refer to ERS Question 4 or Colour Master.

**SNAPSHOT**

3 9 9

This division is **NINETY-NINE** divided by **THREE**.
The first problem is **NINE** tens divided by **THREE**. That’s **THREE**.
The first digit of the answer, three, goes above **NINE**.
The next problem is **NINE** divided by **THREE**. That’s three.
The last digit of the answer, three, goes above **NINE**.

**QUESTION 4** 99 divided by 3. (Repeat question)

5  Display ERS Question 5. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

When counting in 2s from 60 the first five numbers are 62, 64, 66, 68, 70.

**QUESTION 5** When counting in 2s what number comes just **before** 70? (Repeat question)

6  Refer to ERS Question 6 or Colour Master.

**SNAPSHOT**

10 × ? = 20

The multiplication problem is **TEN MULTIPLIED BY SOME NUMBER EQUALS TWENTY**.

**QUESTION 6** Write the missing number. (Repeat question)
7 Display ERS Question 7. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

**QUESTION 7** Multiply 97 by 10. (Repeat question)

8 Refer to ERS Question 8 or Colour Master.

**SNAPSHOT**

\[
\frac{2}{2} = ?
\]

The bottom number of this fraction, TWO, tells how many equal parts in each whole unit.
The top number tells how many equal parts are used.
The used parts are **SHaded**.

**QUESTION 8** Complete the fraction for this picture. (Repeat question)

9 Refer to ERS Question 9 or Colour Master.

**SNAPSHOT** 12.2

This number has one digit after the decimal point. One digit represents **tenths**.
I read this decimal as **TWELVE AND TWO-TENTHS**.

**QUESTION 9** Write the decimal number 12 and 5-tenths. (Repeat question)

10 Refer to ERS Question 10 and 1 m ruler, or Colour Master and 1 m ruler.

**SNAPSHOT**

![1 m ruler](image)

**QUESTION 10** 100 centimetres, how many metres? (Repeat question)

11 Display ERS Question 11. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

A polygon is a **closed** shape with three or more angles and straight sides.
A closed shape means all sides connect.

**QUESTION 11** True or false: a circle has straight sides. (Repeat question)

12 Refer to ERS Question 12 or Colour Master.

**SNAPSHOT** N H Z K

**QUESTION 12** What letters here have a pair of parallel lines? (Repeat question)

13 Refer to ERS Question 13 or Colour Master.

**SNAPSHOT**

<table>
<thead>
<tr>
<th></th>
<th>part A</th>
<th></th>
<th>part B</th>
</tr>
</thead>
</table>

The **average** tells how many there would be in each part if the total sum were evenly shared.
PART A is one part and PART B is the other part.
To find the average number of squares, first find the total sum of the parts.
That’s **FIVE SQUARES PLUS THREE**.
Divide the total sum, 8, by the number of parts.

**QUESTION 13** Find the average number of squares in part A and B. (Repeat question)

14 Display ERS Question 14. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

**QUESTION 14** Find the sum of 2, 1 and 5. (Repeat question)
15 Display ERS Question 15. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

**QUESTION 15** Write in digits 16 dollars and 24 cents. (Repeat question)

16 Display ERS Question 16. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

**QUESTION 16** Write 2 o’clock in the morning in its shortened form. (Repeat question)

17 Display ERS Question 17. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

**QUESTION 17** Multiply 2 by itself, then add 4 to your answer. (Repeat question)

18 Refer to ERS Question 18 or Colour Master.

**SNAPSHOT**

<table>
<thead>
<tr>
<th>Grade three</th>
<th>Grade two</th>
<th>Grade one</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td>16</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Boys</td>
<td>10</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>24</td>
<td>26</td>
</tr>
</tbody>
</table>

This table tells about the number of GIRLS and BOYS in each class at Springville Infant School.

Look at the GRADE ONE COLUMN. The FIRST NUMBER tells how many girls are in Grade one.

**QUESTION 19** How many girls are in Grade one? (Repeat question)

20 Display ERS Question 20. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

**QUESTION 20** Find the least number of cuts needed to cut a log into 11 equal pieces. (Repeat question)

Correct all questions.

**DEBUG** directly after corrections.

**ANSWER KEY**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tr>
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<td>86</td>
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<td>4.10</td>
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<td>4.20</td>
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</tr>
</tbody>
</table>
Lesson 5

Display ERS Lesson 5 and 1 m ruler, or display Colour Masters (see page xiv) and 1 m ruler.

1 Refer to ERS Question 1 or Colour Master.

SNAPSHOT

\[ 544 + 222 \]

**QUESTION 1** Find the sum of **FIVE HUNDRED AND FORTY-FOUR** and **TWO HUNDRED AND TWENTY-TWO**. (Repeat question)

Write your answer in today’s column next to question 1.

2 Refer to ERS Question 2 or Colour Master.

SNAPSHOT

\[ 544 - 222 \]

**QUESTION 2** **FIVE HUNDRED AND FORTY-FOUR** minus **TWO HUNDRED AND TWENTY-TWO**. (Repeat question)

3 Refer to ERS Question 3 or Colour Master.

SNAPSHOT

\[ 31 \times 3 \]

This is a column problem so keep the digits lined up. Start with the ones column: **THREE** multiplied by **ONE** equals **THREE**.

Next, multiply the tens column.

**QUESTION 3** Multiply 31 by 3. (Repeat question)

4 Refer to ERS Question 4 or Colour Master.

SNAPSHOT

\[ \begin{array}{c} \frac{3}{9} \end{array} \]

This division problem is **NINETY-THREE** divided by **THREE**.

The first problem is **NINE** tens divided by **THREE**. That’s **THREE**.

The first digit of the answer, three, goes above **NINE**.

The next problem is **THREE** divided by **THREE**. That’s one.

The last digit of the answer, one, goes above **THREE**.

**QUESTION 4** 93 divided by 3. (Repeat question)

5 Display ERS Question 5. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

When counting in 2s from 60 the first ten numbers are 62, 64, 66, 68, 70 pause 72, 74, 76, 78, 80.

**QUESTION 5** When counting in 2s what number comes just before 70, and what number comes just after 70 when counting in 2s? (Repeat question)

6 Refer to ERS Question 6 or Colour Master.

SNAPSHOT

\[ ? \times 10 = 20 \]

The multiplication problem is **SOME NUMBER MULTIPLIED BY TEN EQUALS TWENTY**.

**QUESTION 6** Write the missing number. (Repeat question)
7 Display ERS Question 7. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

**QUESTION 7** Multiply 89 by 10. (Repeat question)

8 Refer to ERS Question 8 or Colour Master.

**SNAPSHOT**

\[
\frac{4}{4} = ?
\]

The bottom number of a fraction tells how many equal parts in each whole unit. The top number of this fraction, FOUR, tells how many equal parts are used. The used parts are SHADeD.

**QUESTION 8** Complete the fraction for this picture. (Repeat question)

9 Refer to ERS Question 9 or Colour Master.

**SNAPSHOT**

12.1

This number has one digit after the decimal point. One digit represents tenths. I read this decimal as TWELVE and ONE-TENTH.

**QUESTION 9** Write the decimal number 18 and 1-tenth. (Repeat question)

10 Refer to ERS Question 10 and 1 m ruler, or Colour Master and 1 m ruler.

**SNAPSHOT**

Not to scale

**QUESTION 10** This RULER is 100 centimetres in length. How many centimetres in 1-half metre? (Repeat question)

11 Display ERS Question 11. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

**QUESTION 11** Poly means many; Gon means angle. True or false: a circle is a polygon. (Repeat question)

12 Refer to ERS Question 12 or Colour Master.

**SNAPSHOT**

F Y Z X

**QUESTION 12** What letters here have no parallel lines? (Repeat question)

13 Refer to ERS Question 13 or Colour Master.

**SNAPSHOT**

2 + 6 = Total sum of parts

The average tells how many there would be in each part if the total sum were evenly shared. The number TWO is one part and the number SIX is the other part. To find the average of TWO and SIX, first find the total sum of the parts. That’s TWO PLUS SIX. Divide the total sum by the number of parts.

**QUESTION 13** Find the average of 2 and 6. (Repeat question)

14 Display ERS Question 14. Apart from identifying lesson and question number the slide is blank – the object of the display is simply to keep students on track. Colour Master not required.

**QUESTION 14** Find the sum of 1, 4 and 5. (Repeat question)
**Question 15** Write in digits 11 dollars and 8 cents. (Repeat question)

**Question 16** How many hours in one day? (Repeat question)

**Question 17** Multiply 2 by itself, then add 5 to your answer. (Repeat question)

**Question 18** The **TOP SHAPE** is one rectangle. How many rectangles of any size are in the **BOTTOM SHAPE**? (Repeat question)

**Question 19** What is the total number of girls? (Repeat question)

**Question 20** Can a log already cut into two equal pieces be cut into three equal pieces? (Repeat question)

**Answer Key**

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<td>5.2</td>
<td>322</td>
<td>5.12 Y, X</td>
</tr>
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<td>93</td>
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<td>5.14 10</td>
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<td>68, 72</td>
<td>5.15 $11.08</td>
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<tr>
<td>5.6</td>
<td>2</td>
<td>5.16 24 hours</td>
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</tr>
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<td>5.8</td>
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<td>5.19 39</td>
</tr>
<tr>
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<td>50</td>
<td>5.20 No</td>
</tr>
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