Lesson 1

Display ERS Lesson 1, or display Colour Masters (see page xii).

1 *Refer to ERS Question 1 or Colour Master.*

SNAPSHOT

									0
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110

Listen and follow along while I count from 1 to 24.

ONE, TWO, THREE, FOUR *(pause)* **FIVE, SIX, SEVEN, EIGHT** *(pause)* **NINE, TEN, ELEVEN, TWELVE** *(pause)* **THIRTEEN, FOURTEEN, FIFTEEN, SIXTEEN** *(pause)* **SEVENTEEN, EIGHTEEN, NINETEEN, TWENTY** *(pause)* **TWENTY-ONE, TWENTY-TWO, TWENTY-THREE, TWENTY-FOUR**.

QUESTION 1 Listen again, and write the numbers I omit. One, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24. *(Repeat question)*

Write your answer in today's column next to Question 1.

2 *Refer to ERS Question 2 or Colour Master.*

SNAPSHOT

addend		addend		sum
7	+	3	=	10

1	2	3	4	5	6	7	8	9	10
10	9	8	7	6	5	4	3	2	1
1	2	3	4	5	6	7	8	9	10

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

Addends are numbers added together to obtain the sum.

SEVEN and **THREE** are addends, **TEN** is the sum.

QUESTION 2 Two numbers have the sum of 10. One addend is 7. Write the other addend. *(Repeat question)*

Write your answer in today's column next to Question 2.

3 *Refer to ERS Question 3 or Colour Master.*

SNAPSHOT

					difference
10	–	7	=	3	
72	–	70	=	2	
89	–	80	=	9	
92	–	91	=	1	

1	2	3	4	5	6	7	8	9	10
10	9	8	7	6	5	4	3	2	1
1	2	3	4	5	6	7	8	9	10

The **DIFFERENCE** between two numbers tells how much more or less one number is than the other.

TEN minus **SEVEN** equals **THREE**.

Three is the **DIFFERENCE**.

The difference between **SEVENTY** and **SEVENTY-TWO** is **TWO**.

The difference between **EIGHTY** and **EIGHTY-NINE** is **NINE**.

The difference between **NINETY-ONE** and **NINETY-TWO** is **ONE**.

QUESTION 3 What is the difference between 10 and 7? *(Repeat question)*

Write your answer in today's column next to Question 3.

4 *Refer to ERS Question 4 or Colour Master.*

SNAPSHOT

	H	T	Ones
7×10 =		7	**0**
70×10 =	7	0	**0**
75×10 =	7	5	**0**

1	2	3	4	5	6	7	8	9	10		10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10

Counting numbers like 7, 8, 9, 10, and so on, are **whole** numbers.

By shifting a whole number to the left and inserting a zero, you increase the number of **digits**, the number of **places**, and increase the value of the number **10 times**.

To multiply a whole number by 10, simply add zero to the ones place.

SEVEN MULTIPLIED BY TEN EQUALS SEVENTY.

Look at the result SEVENTY, the digit in the ones place is ZERO.

70 is a 2-digit number, holds 2 places, and is 10 times the value of 7.

SEVENTY MULTIPLIED BY TEN EQUALS SEVEN HUNDRED.

Look at the result 700, the digit in the ones place is ZERO.

700 is a 3-digit number, holds 3 places, and is 10 times the value of 70.

SEVENTY-FIVE MULTIPLIED BY TEN EQUALS SEVEN HUNDRED AND FIFTY.

750 is a 3-digit number, holds 3 places, and is 10 times the value of 75.

QUESTION 4 The number 70 is made up of how many digits? *(Repeat question)*

Write your answer in today's column next to Question 4.

5 *Refer to ERS Question 5 or Colour Master.*

SNAPSHOT

Figure 1 oo oo oo oo

Figure 2 oooo oooo

Figure 3 oo oo oo

Division separates a total amount into **equal** groups.

For example: To divide 8 cakes into 4 boxes equally, place a cake in each box until all cakes are used.

FIGURE ONE shows how many cakes should be in each box.

QUESTION 5 Eight cakes are divided into 4 boxes equally. How many cakes in each box? *(Repeat question)*

Write your answer in today's column next to Question 5.

6 *Refer to ERS Question 6 or Colour Master.*

SNAPSHOT

racecar
Hannah
5
33
161

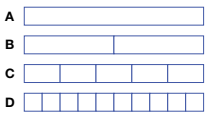
Some words like RACECAR and HANNAH, read the same backwards as they do forwards.

Some numbers like THIRTY-THREE and 44, read the same backwards as they do forwards.

QUESTION 6 Which number, between 30 and 40, reads the same backwards as forwards? *(Repeat question)*

7 *Refer to ERS Question 7 or Colour Master.*

SNAPSHOT



These figures show how the same amount can be divided into equal bars.

FIGURE A shows 1 whole bar.

FIGURE B shows 2 equal bars.

FIGURE C shows 5 equal bars.

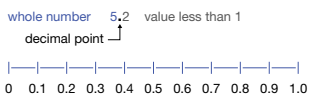
FIGURE D shows 10 equal bars.

Figures A, B, C, and D are all different, but show the same amount.

QUESTION 7 Which figures show the same amount as **FIGURE A**? *(Repeat question)*

8 *Refer to ERS Question 8 or Colour Master.*

SNAPSHOT



FIVE POINT TWO, is a decimal number.

The **decimal point** separates the whole number **FIVE** ones, from the **VALUE LESS THAN ONE**.

The number line is divided into 10 equal parts.

Look at the values less than **ONE**.

Values less than 1, show zero in the ones place.

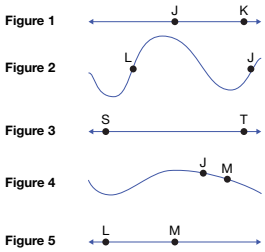
In order from the largest to smallest decimal, you write: **ONE POINT ZERO, ZERO POINT NINE, ZERO POINT EIGHT, ZERO POINT SEVEN, ZERO POINT SIX, ZERO POINT FIVE, ZERO POINT FOUR, ZERO POINT THREE, ZERO POINT TWO, ZERO POINT ONE**.

Look at the number line.

QUESTION 8 Write the decimal that comes halfway between **ZERO POINT ONE** and 0.3. *(Repeat question)*

9 *Refer to ERS Question 9 or Colour Master.*

SNAPSHOT



This line continues in **BOTH DIRECTIONS** *(refer to Figure 1 arrowheads).*

A **point** is an exact location.

This point is identified by the **LETTER J** *(refer to Figure 1).*

This point is identified by the **LETTER K** *(refer to Figure 1).*

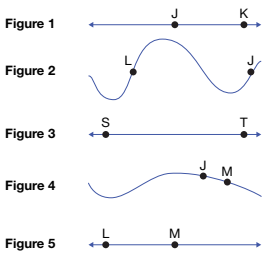
Length is the measure of distance between 2 points.

Look at **FIGURES ONE, TWO, THREE, FOUR,** and **FIVE**.

QUESTION 9 Which figures show 2 points? *(Repeat question)*

10 *Refer to ERS Question 10 or Colour Master.*

SNAPSHOT



A **straight line** continues in **OPPOSITE DIRECTIONS** *(refer to Figure 1 arrowheads).*

A point is an exact location.

This point is identified by the **LETTER J** *(refer to Figure 1).*

This point is identified by the **LETTER K** *(refer to Figure 1).*

Look at **FIGURES ONE, TWO, THREE, FOUR,** and **FIVE**.

QUESTION 10 Which figures show a point J? *(Repeat question)*

11 *Refer to ERS Question 11 or Colour Master.*

SNAPSHOT

Dog name	
Name	Tally
Barney	𝍸 I
Bella	𝍸
Coco	𝍸 𝍸 I
Dixie	𝍸 𝍸 I
Dodger	𝍸 𝍸
Leroy	𝍸 III
Max	𝍸 I
Rocco	II

Dog name	
Name	Frequency
Barney	4
Bella	
Coco	
Dixie	9
Dodger	
Leroy	
Max	6
Rocco	

Jade and Mario conducted a survey to find the most popular dog name from 8 choices.

Jade used **tally marks** to collect and record the data.

Mario started to organize Jade's data in a FREQUENCY TABLE.

The data show that BELLA was the choice of 5 students.

QUESTION 11 How many dog names were there to choose from in all? *(Repeat question)*

12 *Refer to ERS Question 12 or Colour Master.*

SNAPSHOT

Number of coins in set	Coin value		Set value
5	$2		$10
10	$1		$10
20	50c		$10
50	20c		$10
100	10c		$10
200	5c		$10

Look at the second row of the coin table.

A set of FIVE, TWO DOLLAR coins, has a value of TEN DOLLARS.

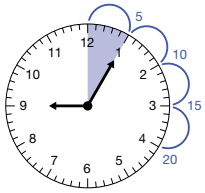
Look at the last row.

A set of TWO HUNDRED, FIVE CENT coins, has a value of TEN DOLLARS.

QUESTION 12 How many $2 coins do you need to have $10? *(Repeat question)*

13 *Refer to ERS Question 13 or Colour Master.*

SNAPSHOT



A **minute** is a unit of time.

It takes 5 minutes for the MINUTE HAND to move from one number to the next.

Look at the loops outside the clock.

Minutes **past** the hour are shown.

FIVE MINUTES, TEN, FIFTEEN, TWENTY.

QUESTION 13 When the minute hand points at ONE, how many minutes have passed the hour? *(Repeat question)*

14 *Refer to ERS Question 14 or Colour Master.*

SNAPSHOT

The TOP SHAPE is a square.

A **square** is a closed shape with 4 straight sides of equal length, and 4 corners of equal size.

QUESTION 14 How many squares of any size are in the BOTTOM SHAPE? *(Repeat question)*

15 *Refer to ERS Question 15 or Colour Master.*

SNAPSHOT

12

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

To find the sum of the digits in the number 12, add ONE + TWO.

12 is a 2-digit number.

The sum of the digits is 3.

QUESTION 15 What is the sum of the digits in the number 12? *(Repeat question)*

Correct all questions.

DEBUG directly after corrections.

ANSWER KEY

1.1	8, 17	1.9	1, 2, 3, 4, 5
1.2	3	1.10	1, 2, 4
1.3	3	1.11	8
1.4	2	1.12	5
1.5	2	1.13	5
1.6	33	1.14	3
1.7	B, C, D	1.15	3
1.8	0.2		

Lesson 2

Display ERS Lesson 2, or display Colour Masters (see page xii).

1 *Refer to ERS Question 1 or Colour Master.*

SNAPSHOT

									0
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110

Listen and follow along while I count from 1 to 24.

ONE, TWO, THREE, FOUR *(pause)* **FIVE, SIX, SEVEN, EIGHT** *(pause)* **NINE, TEN, ELEVEN, TWELVE** *(pause)* **THIRTEEN, FOURTEEN, FIFTEEN, SIXTEEN** *(pause)* **SEVENTEEN, EIGHTEEN, NINETEEN, TWENTY** *(pause)* **TWENTY-ONE, TWENTY-TWO, TWENTY-THREE, TWENTY-FOUR**.

QUESTION 1 Listen again, and write the numbers I omit.

One, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24. *(Repeat question)*

Write your answer in today's column next to Question 1.

2 *Refer to ERS Question 2 or Colour Master.*

SNAPSHOT

addend		addend		sum
7	+	3	=	10

1	2	3	4	5	6	7	8	9	10
10	9	8	7	6	5	4	3	2	1
1	2	3	4	5	6	7	8	9	10

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

Addends are numbers added together to obtain the sum.

SEVEN and **THREE** are addends, **TEN** is the sum.

QUESTION 2 Two numbers have the sum of 10. One addend is 3. Write the other addend. *(Repeat question)*

Write your answer in today's column next to Question 2.

3 *Refer to ERS Question 3 or Colour Master.*

SNAPSHOT

					difference
10	–	7	=		3
72	–	70	=		2
89	–	80	=		9
92	–	91	=		1

1	2	3	4	5	6	7	8	9	10
10	9	8	7	6	5	4	3	2	1
1	2	3	4	5	6	7	8	9	10

The **DIFFERENCE** between two numbers tells how much more or less one number is than the other.

TEN minus **SEVEN** equals **THREE.**

Three is the **DIFFERENCE.**

The difference between **SEVENTY** and **SEVENTY-TWO** is **TWO**.

The difference between **EIGHTY** and **EIGHTY-NINE** is **NINE**.

The difference between **NINETY-ONE** and **NINETY-TWO** is **ONE**.

QUESTION 3 What is the difference between 7 and 10? *(Repeat question)*

Write your answer in today's column next to Question 3.

4 *Refer to ERS Question 4 or Colour Master.*

SNAPSHOT

	H	T	Ones
7×10 =		7	**0**
70×10 =	7	0	**0**
75×10 =	7	5	**0**

1	2	3	4	5	6	7	8	9	10		10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10

Counting numbers like 7, 8, 9, 10, and so on, are **whole** numbers.

By shifting a whole number to the left and inserting a zero, you increase the number of **digits**, the number of **places**, and increase the value of the number **10 times**.

To multiply a whole number by 10, simply add zero to the ones place.

SEVEN MULTIPLIED BY TEN EQUALS SEVENTY.

Look at the result **SEVENTY**, the digit in the ones place is **ZERO**.

70 is a 2-digit number, holds 2 places, and is 10 times the value of 7.

SEVENTY MULTIPLIED BY TEN EQUALS SEVEN HUNDRED.

Look at the result 700, the digit in the ones place is **ZERO**.

700 is a 3-digit number, holds 3 places, and is 10 times the value of 70.

SEVENTY-FIVE MULTIPLIED BY TEN EQUALS SEVEN HUNDRED AND FIFTY.

750 is a 3-digit number, holds 3 places, and is 10 times the value of 75.

QUESTION 4 The number 700 is made up of how many places? *(Repeat question)*

Write your answer in today's column next to Question 4.

5 *Refer to ERS Question 5 or Colour Master.*

SNAPSHOT

Figure 1 oo oo oo oo

Figure 2 oooo oooo

Figure 3 oo oo oo

Division separates a total amount into **equal** groups.

For example: To divide 8 cakes into 4 boxes equally, place a cake in each box until all cakes are used.

FIGURE ONE shows how many cakes should be in each box.

QUESTION 5 Eight cakes are divided into 2 boxes equally. How many cakes in each box? *(Repeat question)*

Write your answer in today's column next to Question 5.

6 *Refer to ERS Question 6 or Colour Master.*

SNAPSHOT

racecar
Hannah
5
33
161

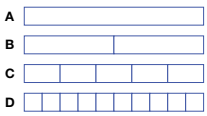
Some words like **RACECAR** and **HANNAH**, read the same backwards as they do forwards.

Some numbers like **THIRTY-THREE** and 44, read the same backwards as they do forwards.

QUESTION 6 Which numbers, between 30 and 50, read the same backwards as forwards? *(Repeat question)*

7 *Refer to ERS Question 7 or Colour Master.*

SNAPSHOT



These figures show how the same amount can be divided into equal bars.

FIGURE A shows 1 whole bar.

FIGURE B shows 2 equal bars.

FIGURE C shows 5 equal bars.

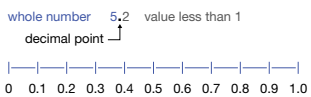
FIGURE D shows 10 equal bars.

Figures A, B, C, and D are all different, but show the same amount.

QUESTION 7 Which figure shows the greatest number of bars? *(Repeat question)*

8 *Refer to ERS Question 8 or Colour Master.*

SNAPSHOT



FIVE POINT TWO, is a decimal number.

The **decimal point** separates the whole number **FIVE** ones, from the **VALUE LESS THAN ONE**.

The number line is divided into 10 equal parts.

Look at the values less than **ONE**.

Values less than 1, show zero in the ones place.

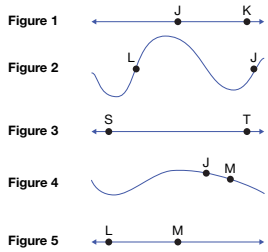
In order from the largest to smallest decimal, you write: **ONE POINT ZERO, ZERO POINT NINE, ZERO POINT EIGHT, ZERO POINT SEVEN, ZERO POINT SIX, ZERO POINT FIVE, ZERO POINT FOUR, ZERO POINT THREE, ZERO POINT TWO, ZERO POINT ONE**.

Look at the number line.

QUESTION 8 Write the decimal that comes halfway between **ZERO POINT THREE** and 0.5. *(Repeat question)*

9 *Refer to ERS Question 9 or Colour Master.*

SNAPSHOT



This line continues in **BOTH DIRECTIONS** *(refer to Figure 1 arrowheads)*.

A **point** is an exact location.

This point is identified by the **LETTER J** *(refer to Figure 1)*.

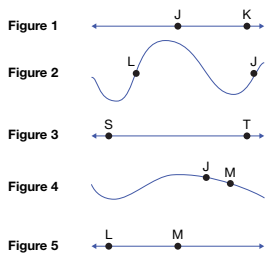
This point is identified by the **LETTER K** *(refer to Figure 1)*.

Length is the measure of distance between 2 points. Look at **FIGURES ONE, TWO, THREE, FOUR,** and **FIVE**.

QUESTION 9 Which figures show 2 points on a straight line? *(Repeat question)*

10 *Refer to ERS Question 10 or Colour Master.*

SNAPSHOT



A **straight line** continues in **OPPOSITE DIRECTIONS** *(refer to Figure 1 arrowheads)*.

A point is an exact location.

This point is identified by the **LETTER J** *(refer to Figure 1)*.

This point is identified by the **LETTER K** *(refer to Figure 1)*.

Look at **FIGURES ONE, TWO, THREE, FOUR,** and **FIVE**.

QUESTION 10 Which figure shows point J on a straight line? *(Repeat question)*

11 *Refer to ERS Question 11 or Colour Master.*

SNAPSHOT

Dog name	
Name	Tally
Barney	𝍸
Bella	𝍸
Coco	𝍸 𝍸 |
Dixie	𝍸 𝍸
Dodger	𝍸 𝍸
Leroy	𝍸 𝍸
Max	𝍸 |
Rocco	||

Dog name	
Name	Frequency
Barney	4
Bella	
Coco	
Dixie	9
Dodger	
Leroy	
Max	6
Rocco	

Jade and Mario conducted a survey to find the most popular dog name from 8 choices.

Jade used **tally marks** to collect and record the data.

Mario started to organize Jade's data in a FREQUENCY TABLE.

The data show that BELLA was the choice of 5 students.

QUESTION 11 How many students chose BELLA? *(Repeat question)*

12 *Refer to ERS Question 12 or Colour Master.*

SNAPSHOT

Number of coins in set	Coin value		Set value
5	$2		$10
10	$1		$10
20	50c		$10
50	20c		$10
100	10c		$10
200	5c		$10

Look at the second row of the coin table.

A set of FIVE, TWO DOLLAR coins, has a value of TEN DOLLARS.

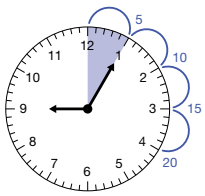
Look at the last row.

A set of TWO HUNDRED, FIVE CENT coins, has a value of TEN DOLLARS.

QUESTION 12 How many 5 cent coins do you need to have $10? *(Repeat question)*

13 *Refer to ERS Question 13 or Colour Master.*

SNAPSHOT



A **minute** is a unit of time.

It takes 5 minutes for the MINUTE HAND to move from one number to the next.

Look at the loops outside the clock.

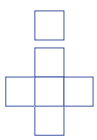
Minutes **past** the hour are shown.

FIVE MINUTES, TEN, FIFTEEN, TWENTY.

QUESTION 13 When the minute hand points at TWO, how many minutes have passed the hour? *(Repeat question)*

14 *Refer to ERS Question 14 or Colour Master.*

SNAPSHOT



The TOP SHAPE is a square.

A **square** is a closed shape with 4 straight sides of equal length, and 4 corners of equal size.

QUESTION 14 How many squares of any size are in the BOTTOM SHAPE? *(Repeat question)*

15 *Refer to ERS Question 15 or Colour Master.*

SNAPSHOT

12

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

To find the sum of the digits in the number 12, add ONE + TWO.

12 is a 2-digit number.

The sum of the digits is 3.

QUESTION 15 Write a 2-digit number, the sum of whose digits is 2. *(Repeat question)*

Correct all questions.

DEBUG directly after corrections.

ANSWER KEY

2.1	7, 19	2.9	1, 3, 5
2.2	7	2.10	1
2.3	3	2.11	5
2.4	3	2.12	200
2.5	4	2.13	10
2.6	33, 44	2.14	5
2.7	D	2.15	11 or 20
2.8	0.4		

Lesson 3

Display ERS Lesson 3, or display Colour Masters (see page xii).

1 *Refer to ERS Question 1 or Colour Master.*

SNAPSHOT

									0
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110

Listen and follow along while I count from 1 to 24.

ONE, TWO, THREE, FOUR *(pause)* FIVE, SIX, SEVEN, EIGHT *(pause)* NINE, TEN, ELEVEN, TWELVE *(pause)* 13, 14, 15, 16 *(pause)* 17, 18, 19, 20 *(pause)* 21, 22, 23, 24.

QUESTION 1 Listen again, and write the numbers I omit.

One, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 21, 22, 23, 24. *(Repeat question)*

Write your answer in today's column next to Question 1.

2 *Refer to ERS Question 2 or Colour Master.*

SNAPSHOT

addend		addend		sum
7	+	3	=	10

1	2	3	4	5	6	7	8	9	10
10	9	8	7	6	5	4	3	2	1
1	2	3	4	5	6	7	8	9	10

The SUM is the total after addition.

Addends are numbers added together to obtain the sum.

SEVEN and THREE are addends, TEN is the sum.

QUESTION 2 Two numbers have the sum of 10. One addend is 9. Write the other addend. *(Repeat question)*

Write your answer in today's column next to Question 2.

3 *Refer to ERS Question 3 or Colour Master.*

SNAPSHOT

					difference
10	–	7	=	3	
72	–	70	=	2	
89	–	80	=	9	
92	–	91	=	1	

1	2	3	4	5	6	7	8	9	10
10	9	8	7	6	5	4	3	2	1
1	2	3	4	5	6	7	8	9	10

The DIFFERENCE between two numbers tells how much more or less one number is than the other.

TEN minus SEVEN equals THREE.

Three is the DIFFERENCE.

The difference between SEVENTY and SEVENTY-TWO is TWO.

The difference between EIGHTY and EIGHTY-NINE is NINE.

The difference between NINETY-ONE and NINETY-TWO is ONE.

QUESTION 3 What is the difference between 89 and 80? *(Repeat question)*

Write your answer in today's column next to Question 3.

4 *Refer to ERS Question 4 or Colour Master.*

SNAPSHOT

	H	T	Ones
7×10 =		7	**0**
70×10 =	7	0	**0**
75×10 =	7	5	**0**

1	2	3	4	5	6	7	8	9	10		10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10

Counting numbers like 7, 8, 9, 10, and so on, are **whole** numbers.

By shifting a whole number to the left and inserting a zero, you increase the number of **digits**, the number of **places**, and increase the value of the number **10 times**.

To multiply a whole number by 10, simply add zero to the ones place.

SEVEN MULTIPLIED BY TEN EQUALS SEVENTY.

Look at the result **SEVENTY**, the digit in the ones place is **ZERO**.

70 is a 2-digit number, holds 2 places, and is 10 times the value of 7.

SEVENTY MULTIPLIED BY TEN EQUALS SEVEN HUNDRED.

Look at the result 700, the digit in the ones place is **ZERO**.

700 is a 3-digit number, holds 3 places, and is 10 times the value of 70.

SEVENTY-FIVE MULTIPLIED BY TEN EQUALS SEVEN HUNDRED AND FIFTY.

QUESTION 4 What number is 10 times the value of 7? *(Repeat question)*

Write your answer in today's column next to Question 4.

5 *Refer to ERS Question 5 or Colour Master.*

SNAPSHOT

Figure 1 oo oo oo oo

Figure 2 oooo oooo

Figure 3 oo oo oo

Division separates a total amount into **equal** groups.

For example: To divide 8 cakes into 4 boxes equally, place a cake in each box until all cakes are used.

FIGURE ONE shows how many cakes should be in each box.

QUESTION 5 Six cakes are divided into 3 boxes equally. How many cakes in each box? *(Repeat question)*

Write your answer in today's column next to Question 5.

6 *Refer to ERS Question 6 or Colour Master.*

SNAPSHOT

racecar
Hannah
5
33
161

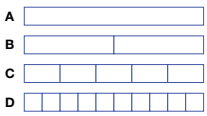
Some words like **RACECAR** and **HANNAH**, read the same backwards as they do forwards.

Some numbers like **THIRTY-THREE** and 44, read the same backwards as they do forwards.

QUESTION 6 Which 2-digit number, more than 90, reads the same backwards as forwards? *(Repeat question)*

7 *Refer to ERS Question 7 or Colour Master.*

SNAPSHOT



These figures show how the same amount can be divided into equal bars.

FIGURE A shows 1 whole bar.

FIGURE B shows 2 equal bars.

FIGURE C shows 5 equal bars.

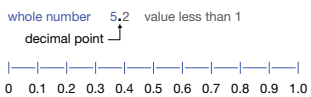
FIGURE D shows 10 equal bars.

Figures A, B, C, and D are all different, but show the same amount.

QUESTION 7 Which figure shows 10 bars? *(Repeat question)*

8 *Refer to ERS Question 8 or Colour Master.*

SNAPSHOT



FIVE POINT TWO, is a decimal number.

The **decimal point** separates the whole number **FIVE** ones, from the **VALUE LESS THAN ONE**.

The number line is divided into 10 equal parts.

Look at the values less than **ONE**.

Values less than 1, show zero in the ones place.

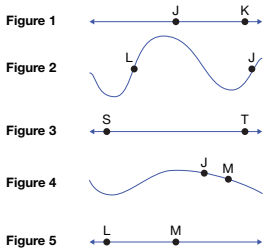
In order from the largest to smallest decimal, you write: **ONE POINT ZERO, ZERO POINT NINE, ZERO POINT EIGHT, ZERO POINT SEVEN, ZERO POINT SIX, ZERO POINT FIVE, ZERO POINT FOUR, ZERO POINT THREE, ZERO POINT TWO, ZERO POINT ONE**.

Look at the number line.

QUESTION 8 Write the decimal that comes halfway between **ZERO POINT FIVE** and 0.7. *(Repeat question)*

9 *Refer to ERS Question 9 or Colour Master.*

SNAPSHOT



This line continues in **BOTH DIRECTIONS** *(refer to Figure 1 arrowheads)*.

A **point** is an exact location.

This point is identified by the **LETTER J** *(refer to Figure 1)*.

This point is identified by the **LETTER K** *(refer to Figure 1)*.

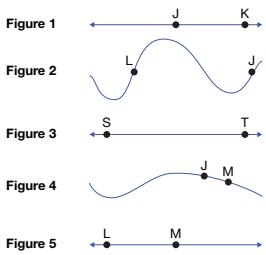
Length is the measure of distance between 2 points.

Look at **FIGURES ONE, TWO, THREE, FOUR,** and **FIVE**.

QUESTION 9 Which figure shows the longest length between 2 points on a straight line? *(Repeat question)*

10 *Refer to ERS Question 10 or Colour Master.*

SNAPSHOT



A **straight line** continues in **OPPOSITE DIRECTIONS** *(refer to Figure 1 arrowheads)*.

A point is an exact location.

This point is identified by the **LETTER J** *(refer to Figure 1)*.

This point is identified by the **LETTER K** *(refer to Figure 1)*.

Look at **FIGURES ONE, TWO, THREE, FOUR,** and **FIVE**.

QUESTION 10 Which figures show a point L? *(Repeat question)*

11 *Refer to ERS Question 11 or Colour Master.*

SNAPSHOT

Dog name	
Name	Tally
Barney	𝍸 |
Bella	𝍸
Coco	𝍸 𝍸 |
Dixie	𝍸 ||||
Dodger	𝍸 𝍸
Leroy	𝍸 |||
Max	𝍸 |
Rocco	||

Dog name	
Name	Frequency
Barney	4
Bella	
Coco	
Dixie	9
Dodger	
Leroy	
Max	6
Rocco	

Jade and Mario conducted a survey to find the most popular dog name from 8 choices.

Jade used **tally marks** to collect and record the data.

Mario started to organize Jade's data in a FREQUENCY TABLE.

The data show that BELLA was the choice of 5 students.

QUESTION 11 Which name did 10 students choose? *(Repeat question)*

12 *Refer to ERS Question 12 or Colour Master.*

SNAPSHOT

Number of coins in set	Coin value		Set value
5	$2		$10
10	$1		$10
20	50c		$10
50	20c		$10
100	10c		$10
200	5c		$10

Look at the second row of the coin table.

A set of FIVE, TWO DOLLAR coins, has a value of TEN DOLLARS.

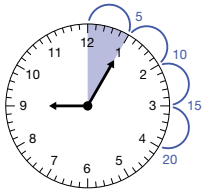
Look at the last row.

A set of TWO HUNDRED, FIVE CENT coins, has a value of TEN DOLLARS.

QUESTION 12 What is the value of five, $2 coins? *(Repeat question)*

13 *Refer to ERS Question 13 or Colour Master.*

SNAPSHOT



A **minute** is a unit of time.

It takes 5 minutes for the MINUTE HAND to move from one number to the next.

Look at the loops outside the clock.

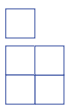
Minutes **past** the hour are shown.

FIVE MINUTES, TEN, FIFTEEN, TWENTY.

QUESTION 13 When the minute hand points at FOUR, how many minutes have passed the hour? *(Repeat question)*

14 *Refer to ERS Question 14 or Colour Master.*

SNAPSHOT



The TOP SHAPE is a square.

A **square** is a closed shape with 4 straight sides of equal length, and 4 corners of equal size.

QUESTION 14 How many squares of any size are in the BOTTOM SHAPE? *(Repeat question)*

15 *Refer to ERS Question 15 or Colour Master.*

SNAPSHOT

12

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

To find the sum of the digits in the number 12, add ONE + TWO.

12 is a 2-digit number.

The sum of the digits is 3.

QUESTION 15 Write a 2-digit number, the sum of whose digits is 3. *(Repeat question)*

Correct all questions.

DEBUG directly after corrections.

ANSWER KEY

3.1	5, 15, 20	3.9	3
3.2	1	3.10	2, 5
3.3	9	3.11	Dodger
3.4	70	3.12	$10
3.5	2	3.13	20
3.6	99	3.14	5
3.7	D	3.15	12, 21, or 30
3.8	0.6		

Lesson 4

Display ERS Lesson 4, or display Colour Masters (see page xii).

1 *Refer to ERS Question 1 or Colour Master.*

SNAPSHOT

									0
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110

Listen and follow along while I count from 1 to 24.

ONE, TWO, THREE, FOUR *(pause)* FIVE, SIX, SEVEN, EIGHT *(pause)* 9, 10, 11, 12 *(pause)* 13, 14, 15, 16 *(pause)* 17, 18, 19, 20 *(pause)* 21, 22, 23, 24.

QUESTION 1 Listen again, and write the numbers I omit.

One, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 23, 24. *(Repeat question)*

Write your answer in today's column next to Question 1.

2 *Refer to ERS Question 2 or Colour Master.*

SNAPSHOT

addend		addend		sum
7	+	3	=	10

1	2	3	4	5	6	7	8	9	10
10	9	8	7	6	5	4	3	2	1
1	2	3	4	5	6	7	8	9	10

The SUM is the total after addition.

Addends are numbers added together to obtain the sum.

QUESTION 2 Two numbers have the sum of 10. One addend is 1. Write the other addend. *(Repeat question)*

Write your answer in today's column next to Question 2.

3 *Refer to ERS Question 3 or Colour Master.*

SNAPSHOT

					difference
10	–	7	=	3	
72	–	70	=	2	
89	–	80	=	9	
92	–	91	=	1	

1	2	3	4	5	6	7	8	9	10
10	9	8	7	6	5	4	3	2	1
1	2	3	4	5	6	7	8	9	10

The DIFFERENCE between two numbers tells how much more or less one number is than the other.

TEN minus SEVEN equals THREE.

Three is the DIFFERENCE.

The difference between EIGHTY and EIGHTY-NINE is NINE.

QUESTION 3 What is the difference between 70 and 72? *(Repeat question)*

Write your answer in today's column next to Question 3.

4 *Refer to ERS Question 4 or Colour Master.*

SNAPSHOT

	H	T	Ones
7×10 =		7	**0**
70×10 =	7	0	**0**
75×10 =	7	5	**0**

1	2	3	4	5	6	7	8	9	10		10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10
1	2	3	4	5	6	7	8	9	10	+	10

Counting numbers like 7, 8, 9, 10, and so on, are **whole** numbers.

By shifting a whole number to the left and inserting a zero, you increase the number of **digits**, the number of **places**, and increase the value of the number **10 times**.

To multiply a whole number by 10, simply add zero to the ones place.

SEVEN MULTIPLIED BY TEN EQUALS SEVENTY.

Look at the result **SEVENTY**, the digit in the ones place is **ZERO**.

70 is a 2-digit number, holds 2 places, and is 10 times the value of 7.

SEVENTY-FIVE MULTIPLIED BY TEN EQUALS SEVEN HUNDRED AND FIFTY.

750 is a 3-digit number, holds 3 places, and is 10 times the value of 75.

QUESTION 4 What number is 10 times the value of 70? *(Repeat question)*

Write your answer in today's column next to Question 4.

5 *Refer to ERS Question 5 or Colour Master.*

SNAPSHOT

Figure 1 oo oo oo oo

Figure 2 oooo oooo

Figure 3 oo oo oo

Division separates a total amount into **equal** groups.

For example: To divide 8 cakes into 4 boxes equally, place a cake in each box until all cakes are used.

FIGURE ONE shows how many cakes should be in each box.

QUESTION 5 Six cakes are divided into 2 boxes equally. How many cakes in each box? *(Repeat question)*

Write your answer in today's column next to Question 5.

6 *Refer to ERS Question 6 or Colour Master.*

SNAPSHOT

racecar
Hannah
5
33
161

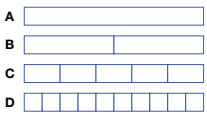
Some words like **RACECAR** and **HANNAH**, read the same backwards as they do forwards.

Some numbers like **THIRTY-THREE** and 44, read the same backwards as they do forwards.

QUESTION 6 Which 2-digit numbers, more than 80, read the same backwards as forwards? *(Repeat question)*

7 *Refer to ERS Question 7 or Colour Master.*

SNAPSHOT



These figures show how the same amount can be divided into equal bars.

FIGURE A shows 1 whole bar.

FIGURE B shows 2 equal bars.

FIGURE C shows 5 equal bars.

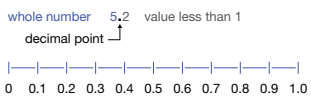
FIGURE D shows 10 equal bars.

Figures A, B, C, and D are all different, but show the same amount.

QUESTION 7 Which figure shows the least number of bars? *(Repeat question)*

8 *Refer to ERS Question 8 or Colour Master.*

SNAPSHOT



FIVE POINT TWO, is a decimal number.

The **decimal point** separates the whole number **FIVE** ones, from the **VALUE LESS THAN ONE**.

The number line is divided into 10 equal parts.

Look at the values less than **ONE**.

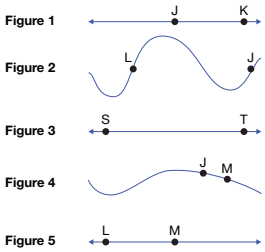
Values less than 1, show zero in the ones place.

Look at the number line.

QUESTION 8 Write the decimal that comes halfway between **ZERO POINT EIGHT** and 1.0. *(Repeat question)*

9 *Refer to ERS Question 9 or Colour Master.*

SNAPSHOT



A **point** is an exact location.

This point is identified by the **LETTER J** *(refer to Figure 1)*.

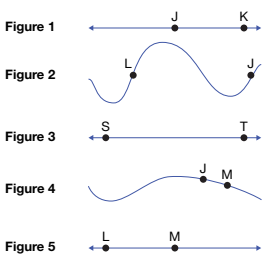
Length is the measure of distance between 2 points.

Look at **FIGURES ONE, TWO, THREE, FOUR,** and **FIVE**.

QUESTION 9 Which figure shows the longest length between 2 points? *(Repeat question)*

10 *Refer to ERS Question 10 or Colour Master.*

SNAPSHOT



A **straight line** continues in **OPPOSITE DIRECTIONS** *(refer to Figure 1 arrowheads)*.

This point is identified by the **LETTER K** *(refer to Figure 1)*.

Look at **FIGURES ONE, TWO, THREE, FOUR,** and **FIVE**.

QUESTION 10 Which figure shows point L on a straight line? *(Repeat question)*

11 *Refer to ERS Question 11 or Colour Master.*

SNAPSHOT

Dog name		Dog name	
Name	Tally	Name	Frequency
Barney	𝍸	Barney	4
Bella	𝍸	Bella	
Coco	𝍸 𝍸 |	Coco	
Dixie	𝍸 𝍸	Dixie	9
Dodger	𝍸 𝍸	Dodger	
Leroy	𝍸 𝍸	Leroy	
Max	𝍸 |	Max	6
Rocco	||	Rocco	

Jade and Mario conducted a survey to find the most popular dog name from 8 choices.

Jade used **tally marks** to collect and record the data.

Mario started to organize Jade's data in a FREQUENCY TABLE.

QUESTION 11 Which name did 2 students choose? *(Repeat question)*

12 *Refer to ERS Question 12 or Colour Master.*

SNAPSHOT

Number of coins in set	Coin value		Set value
5	$2		$10
10	$1		$10
20	50c		$10
50	20c		$10
100	10c		$10
200	5c		$10

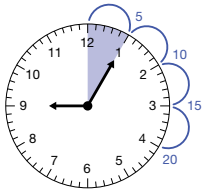
Look at the last row of the coin table.

A set of TWO HUNDRED, FIVE CENT coins, has a value of TEN DOLLARS.

QUESTION 12 What is the value of two hundred, 5 cent coins? *(Repeat question)*

13 *Refer to ERS Question 13 or Colour Master.*

SNAPSHOT



A **minute** is a unit of time.

It takes 5 minutes for the MINUTE HAND to move from one number to the next.

Look at the loops outside the clock.

Minutes **past** the hour are shown.

QUESTION 13 When the minute hand points at FOUR, how many minutes have passed the 3? *(Repeat question)*

14 *Refer to ERS Question 14 or Colour Master.*

SNAPSHOT

The TOP SHAPE is a square.

A **square** is a closed shape with 4 straight sides of equal length, and 4 corners of equal size.

QUESTION 14 How many squares of any size are in the BOTTOM SHAPE? *(Repeat question)*

15 *Refer to ERS Question 15 or Colour Master.*

SNAPSHOT

12

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

To find the sum of the digits in the number 12, add ONE + TWO.

QUESTION 15 Write a 2-digit number, the sum of whose digits is 4. *(Repeat question)*

Correct all questions.

DEBUG directly after corrections.

ANSWER KEY

4.1	3, 13, 21, 22	4.9	2
4.2	9	4.10	5
4.3	2	4.11	Rocco
4.4	700	4.12	$10
4.5	3	4.13	5
4.6	88, 99	4.14	5
4.7	A	4.15	13, 22, 31, or 40
4.8	0.9		

Lesson 5

Display ERS Lesson 5, or display Colour Masters (see page xii).

1 *Refer to ERS Question 1 or Colour Master.*

SNAPSHOT

									0
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110

Listen and follow along while I count from 1 to 24.

ONE, TWO, THREE, FOUR *(pause)* 5, 6, 7, 8 *(pause)* 9, 10, 11, 12 *(pause)* 13, 14, 15, 16 *(pause)* 17, 18, 19, 20 *(pause)* 21, 22, 23, 24.

QUESTION 1 Listen again, and write the numbers I omit.

One, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24. *(Repeat question)*

Write your answer in today's column next to Question 1.

2 *Refer to ERS Question 2 or Colour Master.*

SNAPSHOT

addend		addend		sum
7	+	3	=	10

1	2	3	4	5	6	7	8	9	10
10	9	8	7	6	5	4	3	2	1
1	2	3	4	5	6	7	8	9	10

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

Addends are numbers added together to obtain the sum.

QUESTION 2 Two numbers have the sum of 10. One addend is 5. Write the other addend. *(Repeat question)*

Write your answer in today's column next to Question 2.

3 *Refer to ERS Question 3 or Colour Master.*

SNAPSHOT

					difference
10	–	7	=		3
72	–	70	=		2
89	–	80	=		9
92	–	91	=		1

1	2	3	4	5	6	7	8	9	10
10	9	8	7	6	5	4	3	2	1
1	2	3	4	5	6	7	8	9	10

The **DIFFERENCE** between two numbers tells how much more or less one number is than the other.

TEN minus **SEVEN** equals **THREE**.

Three is the **DIFFERENCE**.

QUESTION 3 What is the difference between 91 and 92? *(Repeat question)*

Write your answer in today's column next to Question 3.

4 *Refer to ERS Question 4 or Colour Master.*

SNAPSHOT

		H	T	Ones
7 × 10	=		7	**0**
70 × 10	=	7	0	**0**
75 × 10	=	7	5	**0**

1	2	3	4	5	6	7	8	9	10	10
1	2	3	4	5	6	7	8	9	10	+ 10
1	2	3	4	5	6	7	8	9	10	+ 10
1	2	3	4	5	6	7	8	9	10	+ 10
1	2	3	4	5	6	7	8	9	10	+ 10
1	2	3	4	5	6	7	8	9	10	+ 10
1	2	3	4	5	6	7	8	9	10	+ 10

Counting numbers like 7, 8, 9, 10, and so on, are **whole** numbers.

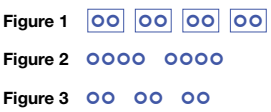
By shifting a whole number to the left and inserting a zero, you increase the number of **digits**, the number of **places**, and increase the value of the number **10 times**.

QUESTION 4 Multiply 70 by 10. *(Repeat question)*

Write your answer in today's column next to Question 4.

5 *Refer to ERS Question 5 or Colour Master.*

SNAPSHOT



Division separates a total amount into **equal** groups.

For example: To divide 8 cakes into 4 boxes equally, place a cake in each box until all cakes are used.

FIGURE ONE shows how many cakes should be in each box.

QUESTION 5 Ten cakes are divided into 2 boxes equally. How many cakes in each box? *(Repeat question)*

Write your answer in today's column next to Question 5.

6 *Refer to ERS Question 6 or Colour Master.*

SNAPSHOT

racecar
Hannah
5
33
161

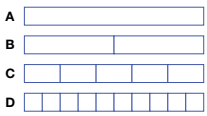
Some words like RACECAR and HANNAH, read the same backwards as they do forwards.

Some numbers like THIRTY-THREE and 44, read the same backwards as they do forwards.

QUESTION 6 Which single-digit numbers, more than 7, read the same backwards as forwards? *(Repeat question)*

7 *Refer to ERS Question 7 or Colour Master.*

SNAPSHOT



These figures show how the same amount can be divided into equal bars.

FIGURE A shows 1 whole bar.

FIGURE B shows 2 equal bars.

FIGURE C shows 5 equal bars.

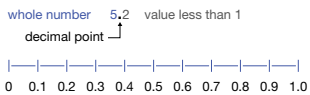
FIGURE D shows 10 equal bars.

Figures A, B, C, and D are all different, but show the same amount.

QUESTION 7 Which figure shows only 1 bar? *(Repeat question)*

8 *Refer to ERS Question 8 or Colour Master.*

SNAPSHOT



FIVE POINT TWO, is a decimal number.

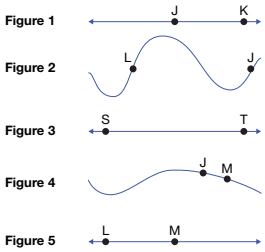
The **decimal point** separates the whole number FIVE ones, from the VALUE LESS THAN ONE.

Look at the number line.

QUESTION 8 Write the decimal that comes halfway between ZERO and ZERO POINT TWO. *(Repeat question)*

9 *Refer to ERS Question 9 or Colour Master.*

SNAPSHOT



A **point** is an exact location.

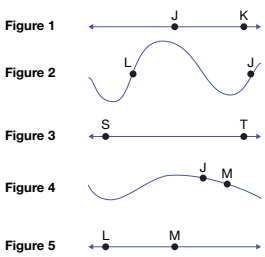
This point is identified by the **LETTER K** *(refer to Figure 1).*

Look at **FIGURES ONE, TWO, THREE, FOUR,** and **FIVE**.

QUESTION 9 Which figures show about the same length between 2 points? *(Repeat question)*

10 *Refer to ERS Question 10 or Colour Master.*

SNAPSHOT



A **straight line** continues in **OPPOSITE DIRECTIONS** *(refer to Figure 1 arrowheads).*

This point is identified by the **LETTER J** *(refer to Figure 1).*

Look at **FIGURES ONE, TWO, THREE, FOUR,** and **FIVE**.

QUESTION 10 Which figures show a straight line? *(Repeat question)*

11 *Refer to ERS Question 11 or Colour Master.*

SNAPSHOT

Dog name	
Name	Tally
Barney	𝍸 I
Bella	𝍸
Coco	𝍸 𝍸 I
Dixie	𝍸 III
Dodger	𝍸 𝍸
Leroy	𝍸 III
Max	𝍸 I
Rocco	II

Dog name	
Name	Frequency
Barney	4
Bella	
Coco	
Dixie	9
Dodger	
Leroy	
Max	6
Rocco	

Jade and Mario conducted a survey to find the most popular dog name from 8 choices.

Jade used **tally marks** to collect and record the data.

Mario started to organize Jade's data in a **FREQUENCY TABLE**.

QUESTION 11 Which name did 6 students choose? *(Repeat question)*

12 *Refer to ERS Question 12 or Colour Master.*

SNAPSHOT

Number of coins in set	Coin value		Set value
5	$2		$10
10	$1		$10
20	50c		$10
50	20c		$10
100	10c		$10
200	5c		$10

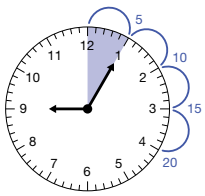
Look at the second row of the coin table.

A set of **FIVE, TWO DOLLAR** coins, has a value of **TEN DOLLARS**.

QUESTION 12 True or false: two hundred, 5 cent coins, is of greater value than five, $2 coins. *(Repeat question)*

13 *Refer to ERS Question 13 or Colour Master.*

SNAPSHOT



A **minute** is a unit of time.

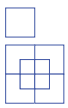
It takes 5 minutes for the MINUTE HAND to move from one number to the next.

Look at the clock.

QUESTION 13 When the minute hand points at FOUR, how many minutes have passed the 2? *(Repeat question)*

14 *Refer to ERS Question 14 or Colour Master.*

SNAPSHOT



The TOP SHAPE is a square.

A **square** is a closed shape with 4 straight sides of equal length, and 4 corners of equal size.

QUESTION 14 How many squares of any size are in the BOTTOM SHAPE? *(Repeat question)*

15 *Refer to ERS Question 15 or Colour Master.*

SNAPSHOT

12

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

QUESTION 15 Write a 2-digit number, the sum of whose digits is 5. *(Repeat question)*

Correct all questions.

DEBUG directly after corrections.

Before the next lesson students should complete the Round Task.

ANSWER KEY

5.1	2, 10, 11, 23	5.9	1, 5
5.2	5	5.10	1, 3, 5
5.3	1	5.11	Max
5.4	700	5.12	false
5.5	5	5.13	10
5.6	8, 9	5.14	10
5.7	A	5.15	14, 23, 32, 41 or 50
5.8	0.1		