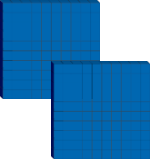# Reasoning and Problem Solving – 100s, 10s and 1s 1

1a. Edith says she has made the number 287.

Hundreds	Tens	Ones

Explain her mistake.

☆ D

R

1b. Blake says he has made the number 414.

Hundreds	Tens	Ones

Explain his mistake.

☆ D

R

2a. Match the description to the correct number.

Aadil: My number has two hundreds, six tens and three ones.

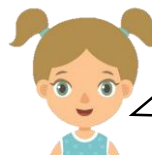Hattie: My number has three hundreds, two tens and nine ones.

329	263

☆ D

PS

2b. Match the description to the correct number.

Amber: My number has seven hundreds, one ten and six ones.

Max: My number has six hundreds, four tens and three ones.

716	643

☆ D

PS

3a. Find three 3-digit numbers you can make using these digit cards.
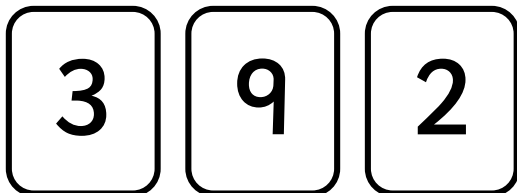
3 **9** **2**

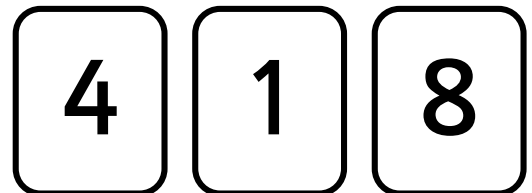You can only use each card once in each number.

☆ D

PS

3b. Find three 3-digit numbers you can make using these digit cards.

4 **1** **8**

You can only use each card once in each number.

☆ D

PS

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Reasoning and Problem Solving – 100s, 10s and 1s 1 – Year 3 Developing

Reasoning and Problem Solving – 100s, 10s and 1s 1

4a. Harry says he has made the number 531.

Hundreds	Tens	Ones
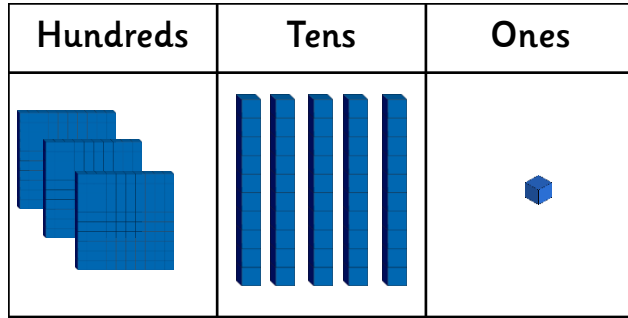
Do you agree? Explain why or why not.

☆ E   R

4b. Scarlett says she has made the number 294.

Hundreds	Tens	Ones
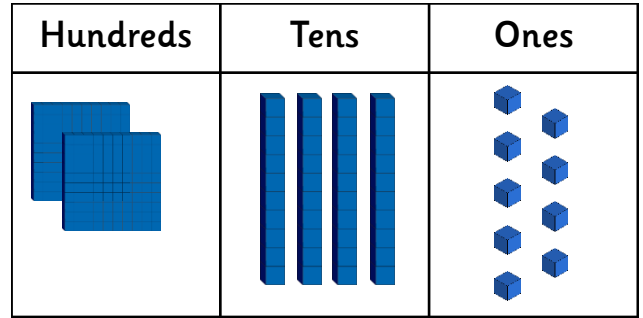
Do you agree? Explain why or why not.

☆ E   R

5a. Match the description to the correct number.

Cheng: My number has four hundreds, three tens and two ones.

Nettie: My number has two tens, three hundreds and six ones.

Sam: My number has eight ones, five tens and three hundreds.

326	328	432	358

☆ E   PS

5b. Match the description to the correct number.

Lucy: My number has six hundreds, eight tens and no ones.

Vikran: My number has two ones, nine tens and seven hundreds.

Betty: My number has six tens, one hundreds and five ones.

792	165	681	680

☆ E   PS

6a. Find all the 3-digit numbers you can make using these digit cards.

8 **1** **4**
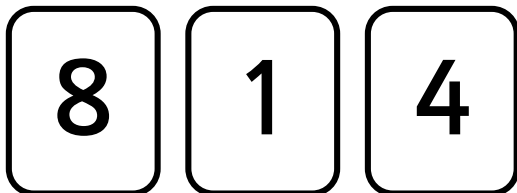
You can only use each card once in each number.

☆ E   PS

6b. Find all the 3-digit numbers you can make using these digit cards.

3 **7** **2**

You can only use each card once in each number.

☆ E   PS

Reasoning and Problem Solving – 100s, 10s and 1s 1

7a. Beth says she has made the number 615.

Hundreds	Tens	Ones

Do you agree? Explain why or why not.

GD   R

7b. Zac says he has made the number 4,108.

Hundreds	Tens	Ones

Do you agree? Explain why or why not.

GD   R

8a. Match the description to the correct number.

Simon: My number has six thousands, two hundreds, seven tens and eight ones.

Maya: My number has two hundreds, eight tens, 6 thousands and seven ones.
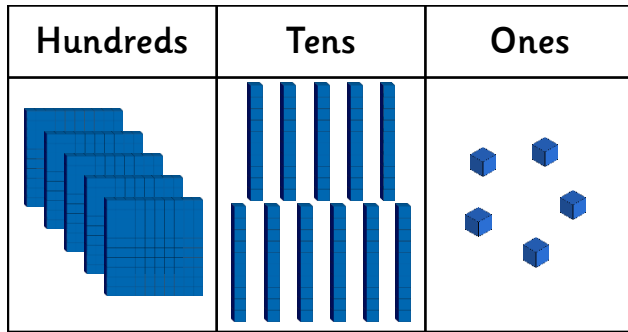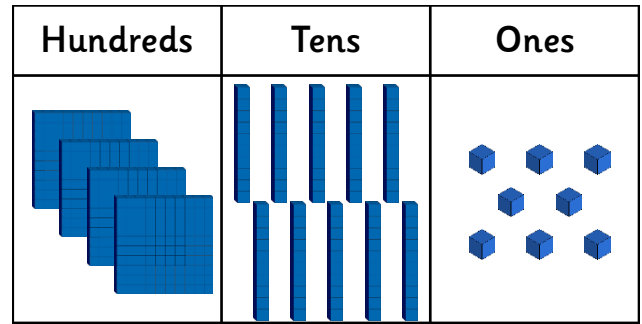
Maria: My number has two hundreds, eight tens, seven thousands and 6 ones.

7,286	6,278	6,287	7,268

GD   PS

8b. Match the description to the correct number.

Rosie: My number has six ones, five hundreds, four tens and three thousands.

Oscar: My number has six hundreds, five tens, four thousands, and three ones.

Nicola: My number has six hundreds, five tens, three thousands and four ones.

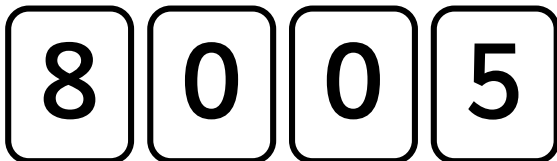| 3,654	4,653	4,635	3,546

GD   PS

9a. Find al the 3 and 4-digit numbers you can make using these digit cards.

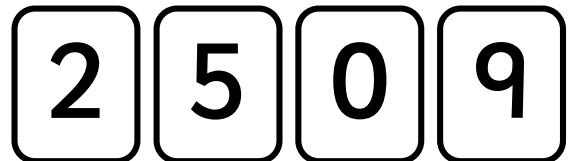| 8	0	0	5

You can only use each card once in each number.

GD   PS

9b. Find all the 3 and 4-digit numbers you can make using these digit cards.

2	5	0	9

You can only use each card once in each number.

GD   PS

Reasoning and Problem Solving – 100s, 10s, and 1s – Year 3 Greater Depth

Reasoning and Problem Solving – 100s, 10s and 1s 1

Developing

1a. Edith has not included eight tens.

1b. Blake has not included four hundreds.

2a. Aadil – 263; Hattie – 329

2b. Amber – 716; Max – 643

3a. Various answers; for example: 239, 293, 329, 392, 923 or 932.

3b. Various answers; for example: 148, 184, 418, 481, 814, 841.

Expected

4a. No, because he has three hundreds, five tens and one ones so he has made the number 351, not 531. He could have mixed up the hundreds and tens.

4b. No, because she has two hundreds, four tens and nine ones so she has made 249, not 294. She could have mixed up the tens and ones.

5a. Cheng – 432; Nettie – 326; Sam – 358

5b. Lucy – 680; Vikran – 792; Betty – 165

6a. 148; 184; 418; 481; 814; 841

6b. 237; 273; 327; 372; 723; 732

Greater Depth

7a. Yes, because Beth only has five hundreds, but she has eleven tens which make 110. 500 + 110 + 5 = 615.

7b. No, because he has four hundreds, ten tens and eight ones so he has made 508.

8a. Simon – 6,278; Maya – 6,287; Maria – 7,286

8b. Rosie – 3,546; Oscar – 4,653; Nicola – 3,654

9a. Various answers; for example: 500; 508; 805; 850; 5,008; 5,080; 8,500

9b. Various answers; for example: 205; 250; 290; 520; 2,059; 2,509; 9,205