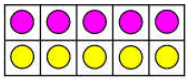
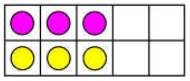
Overview Week 2

Overview:

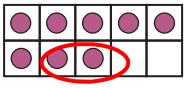
To explore numbers to 10 using the rows arrangement make sure that the following options are selected. They should be the default settings.

Rows Arrangement Features:

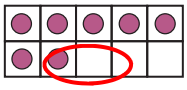




- Rows arrangement shows numbers in relation to 5 being half of ten. Numbers 5 and less, show counters only in the top row. Numbers greater than 5, show counters in the top and bottom rows.
- It allows for easy doubling of numbers greater than 5
  e.g. double 8 is 16: double 5 is 10, double 3 is 6, 10 + 6 = 16



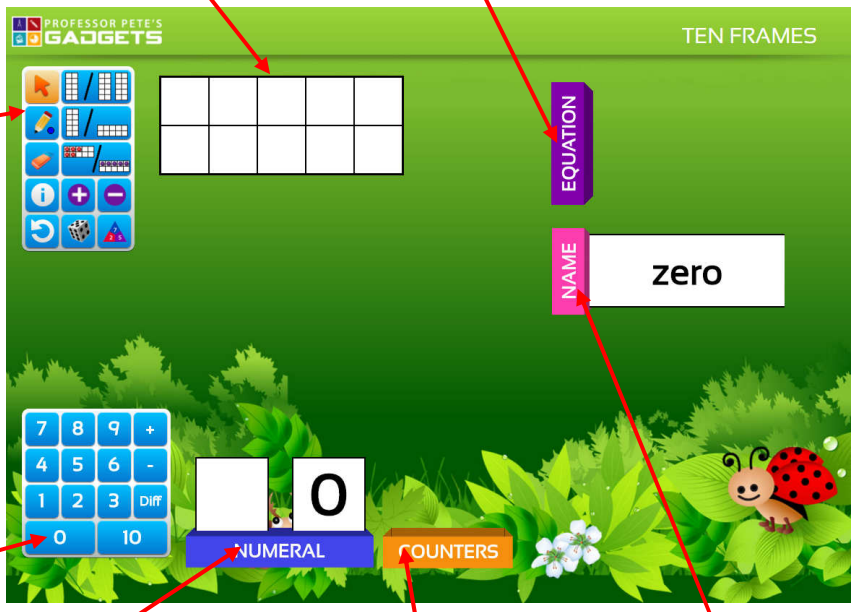
- N.B. Some students find it difficult to see the difference between the numbers 7 and 8 as the patterns of the counters are very similar, the main difference being the counters in the middle of the shape.



Ten Frame: single frame

EQUATION: hide it (close it)

Toolbox: Check settings
- Single ten frame
- Horizontal layout
- Rows arrangement (purple counters)



Key Pad: for entering numbers

NAME: hide or show the spelling of the number

NUMERAL: hide or show the symbol form of the number

COUNTERS: hide or show the counters on the ten frames

Lesson 2A

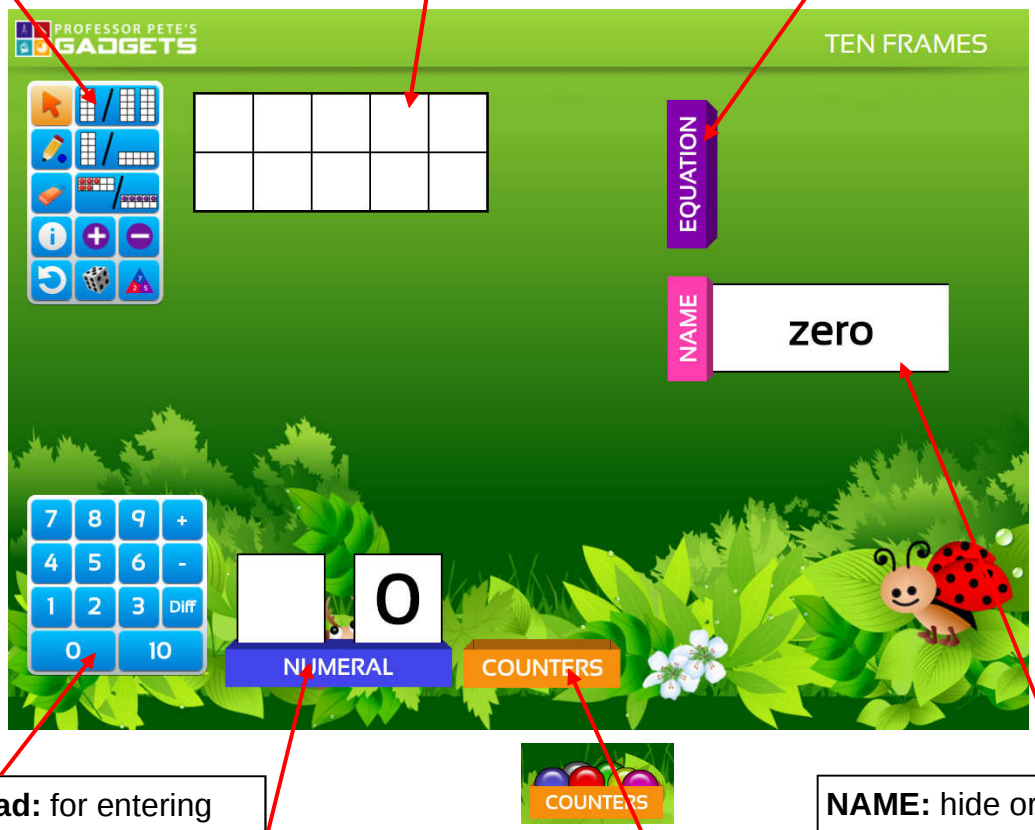
To explore numbers to 10 using the rows arrangement make sure that the following options are selected. They should be the default settings. Familiarize yourself with the different boxes and functions.

Toolbox: Check default settings

- Single ten frame
- Horizontal layout
- Rows arrangement (purple counters)

Ten Frame: single frame

EQUATION: hide it (close it)



Key Pad: for entering numbers

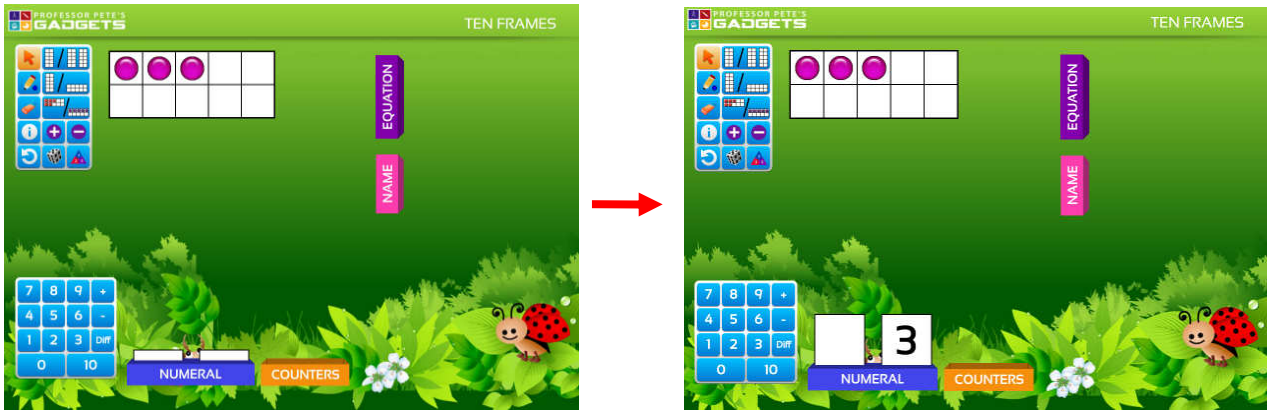
NUMERAL: hide or show the symbol form of the number

COUNTERS: hide or show the counters on the ten frames

NAME: hide or show the spelling of the number

Lesson 2A Cont'd

- Close all boxes, keep the counters on screen.
- Enter a number from 1 to 5 in the keypad.
- Ask students to say how many counters are on screen. If students cannot subitize it then ask them to count it. Show the NUMERAL by opening to check response.



- Discuss features of the number such as:
  - Does the number nearly make a row? Is it close to the full row of 5?
  - See that 3 is one more than 2 (count them).
  - What happens if we put one more on there (count on one)?
  - Have students write the numeral on the worksheet. Can they find that number and then trace and write their own number to complete the line?
  - Ask students to show you this number on their ten frame.
- Repeat this line of questioning with the different numbers to 5.
- Continue showing students the ten frames until they can instantly recall the number on the ten frame without the NUMERAL showing. Subitizing these numbers is crucial before progressing.
- Close the COUNTERS and open the NUMERAL. Show students a numeral and have them show you that number on their ten frames. Have them say the number.
- **If students are ready for this step:** Open the NAME box and show how the word is written and have them write the name on the worksheet.
- **Worksheet activities:** Complete only some of them. Remember you do not need to do all the activities but choose the best ones most suitable for your students. Alternatively you could use the extra worksheets for early finishers.

Recognizing numbers to 10

1 1 1 1 1 1 1 1 1 1

2 2 2 2 2 2 2 2 2

3 3 3 3 3 3 3 3 3

4 4 4 4 4 4 4 4 4

5 5 5 5 5 5 5 5 5

1 2 3 4 5 1 2 3 4 5

Recognizing numbers to 10

1 1 1 1 1 1 1 1 1 1

2 2 2 2 2 2 2 2 2 2

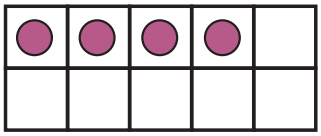
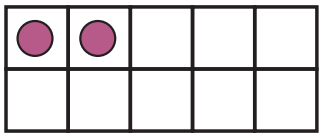
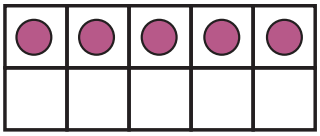
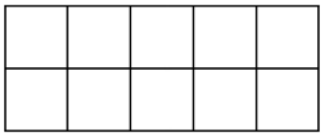
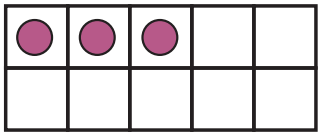
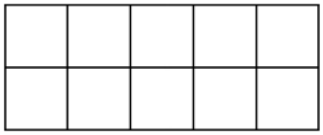
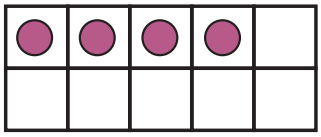
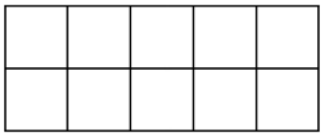
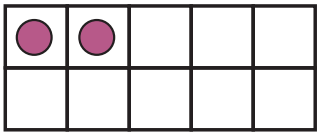
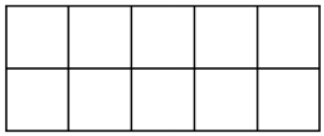
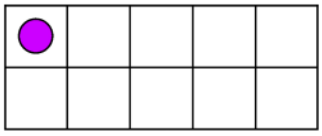
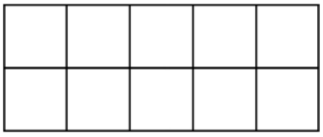
3 3 3 3 3 3 3 3 3 3

4 4 4 4 4 4 4 4 4 4

5 5 5 5 5 5 5 5 5 5

1 2 3 4 5 1 2 3 4 5

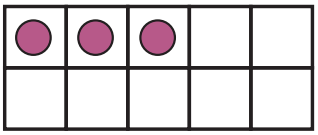
Recognizing numbers to 10

Write the number.		Draw the dots.	
	4		2
			3
			5
			1
			4
			2

Recognizing numbers to 10

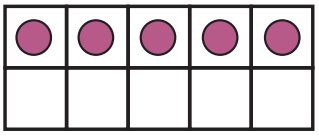
Fill in the missing numbers, dots or words to make them match.

Don't forget to <u>say</u> the number as well.



three

3



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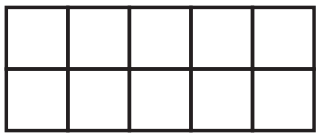
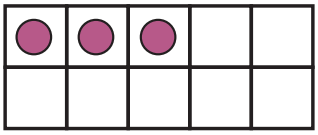
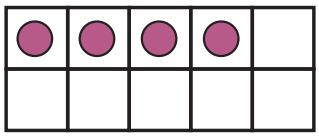


four





one

Recognizing numbers to 10

one	one	one
two	two	two
three	three	three
four	four	four
five	five	five
three	four	five

Lesson 2B

To explore numbers to 10 using the rows arrangement make sure that the following options are selected.

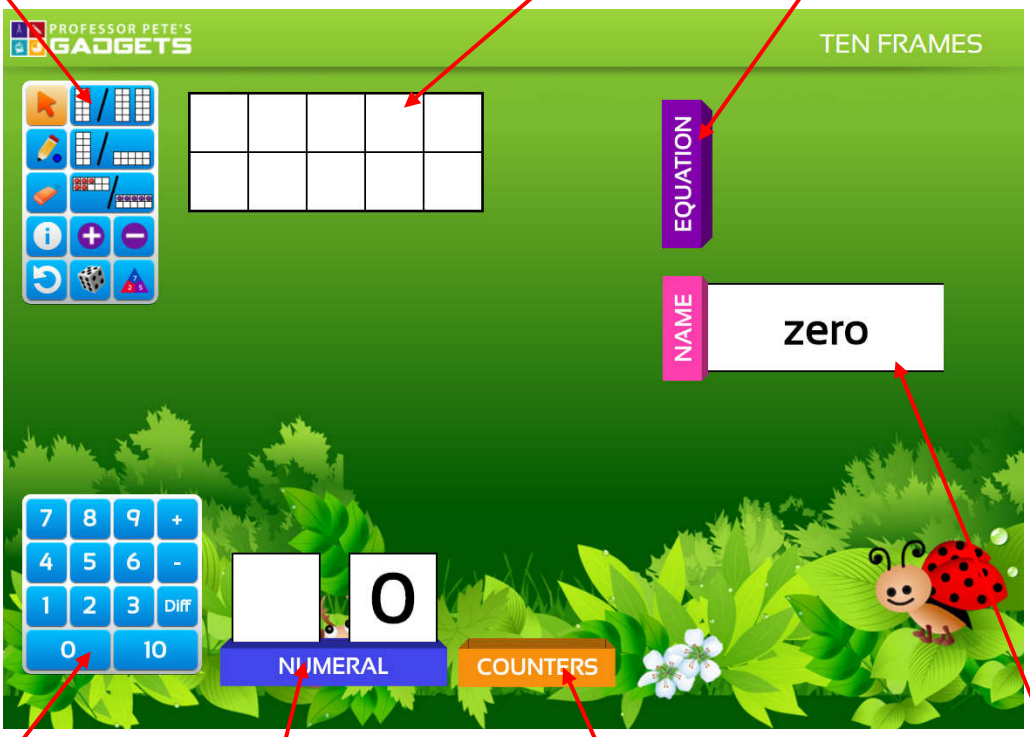
DO NOT progress on to the new numbers if the students cannot subitize the numbers 1-5. There is no need to rush, rather it is better that the students really know their numbers before moving on each day. This is especially necessary if students are becoming confused with the 2 different arrangements of the counters.

Toolbox: Check default settings

- Single ten frame
- Horizontal layout
- Rows arrangement (purple counters)

Ten Frame: single frame

EQUATION: hide it (close it)



Key Pad: for entering numbers

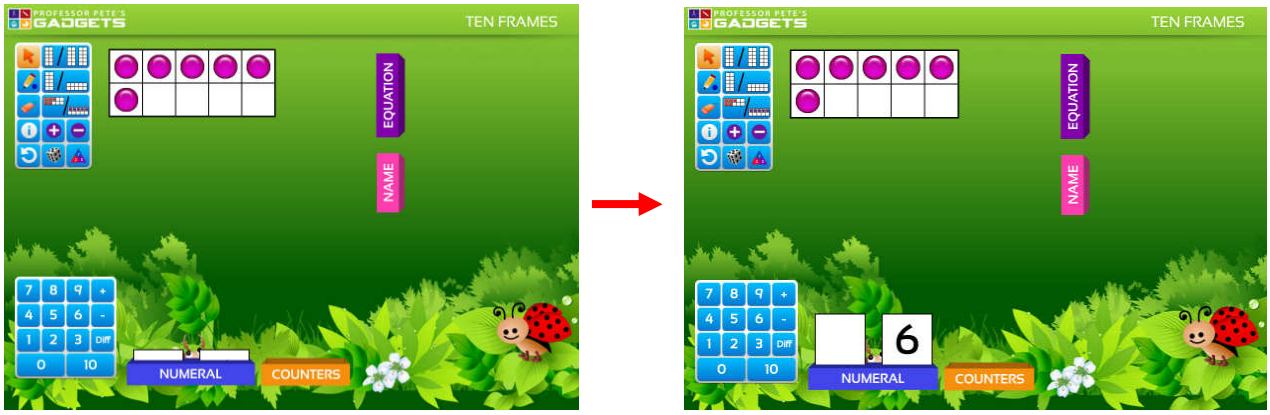
NUMERAL: hide or show the symbol form of the number

COUNTERS: hide or show the counters on the ten frames

NAME: hide or show the spelling of the number

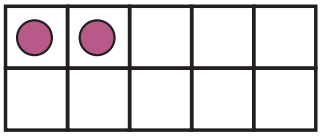
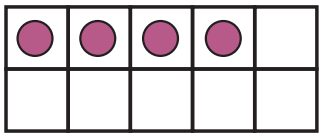
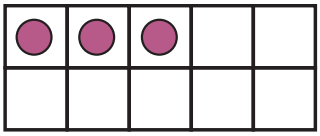
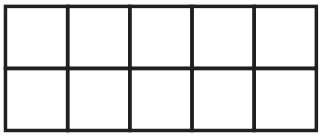
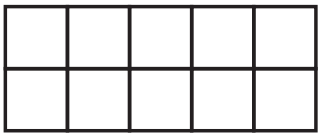
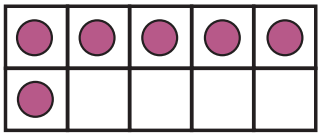
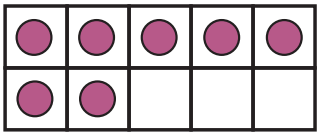
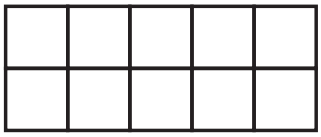
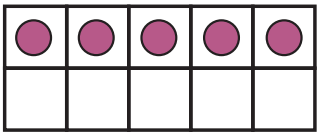
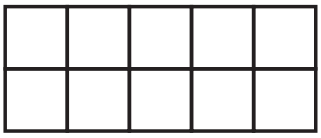
Lesson 2B Cont'd

- Close all boxes, keep the counters on screen.
- Revise numbers 1-5 from previous day.
- Enter a number 6 in the keypad.
- Ask students to say how many counters are on screen. If students cannot subitize it then ask them to count it. Refer to 5 and show them it is one more. Show the NUMERAL by opening to check response.



- Discuss features of the number such as:
  - Does the number nearly make a row? Is it close to the full row of 5?
  - See that 6 is one more than 5 (count them).
  - What happens if we put one more on there (count on one)?
  - Have students write the numeral on the worksheet. Can they find that number and then trace and write their own number to complete the line?
  - Ask students to show you this number on their ten frame.
- Repeat this line of questioning with 7, then 0 (this is when there is nothing at all!).
- Continue showing students the ten frames from 0-7 until they can instantly recall the number on the ten frame without the NUMERAL showing. Subitizing these numbers is crucial before progressing.
- Close the COUNTERS and open the NUMERAL. Show students a numeral and have them show you that number on their ten frames. Have them say the number.
- Open the NAME box and show how the word is written and have them write the name on the worksheet (if students are ready for this step).
- **Worksheet activities:** Complete only some of them. Remember you do not need to do all the activities but choose the best ones most suitable for your students. Alternatively you could use the extra worksheets for early finishers.

Recognizing numbers to 10

Write the number.		Draw the dots.	
	2		4
			5
			6
			5
			0
			7

Recognizing numbers to 10

6 6 6 6 6 6 6 6 6

7 7 7 7 7 7 7 7 7

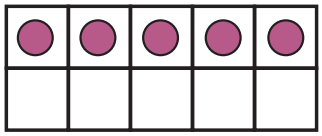
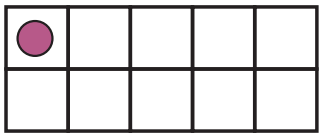
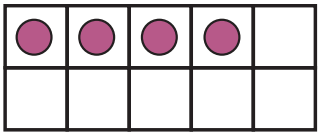
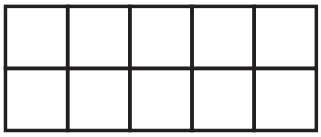
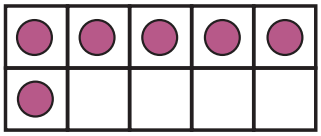
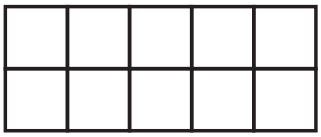
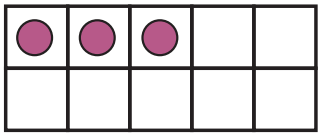
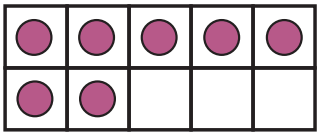
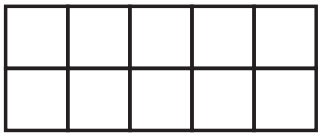
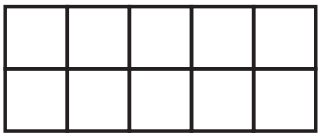
0 0 0 0 0 0 0 0 0

4 4 4 4 4 4 4 4 4

5 5 5 5 5 5 5 5 5

0 1 2 3 4 5 6 7

Recognizing numbers to 10

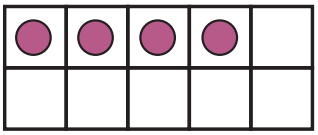
Write the number.		Draw the dots.	
	5		1
			3
			6
			7
			0
			5

zero	zero	zero
seven	seven	seven
six	six	six
four	four	four
five	five	five
zero	six	seven

Recognizing numbers to 10

Fill in the missing numbers, dots or words to make them match.

Don't forget to <u>say</u> the number as well.

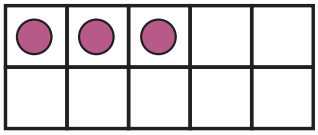


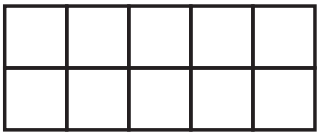
four

4

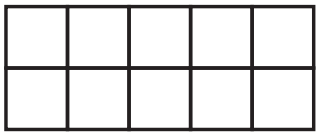
7

six

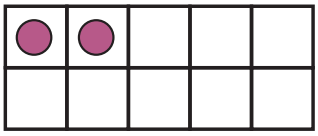




zero



five



Lesson 2C

To explore numbers to 10 using the rows arrangement make sure that the following options are selected.

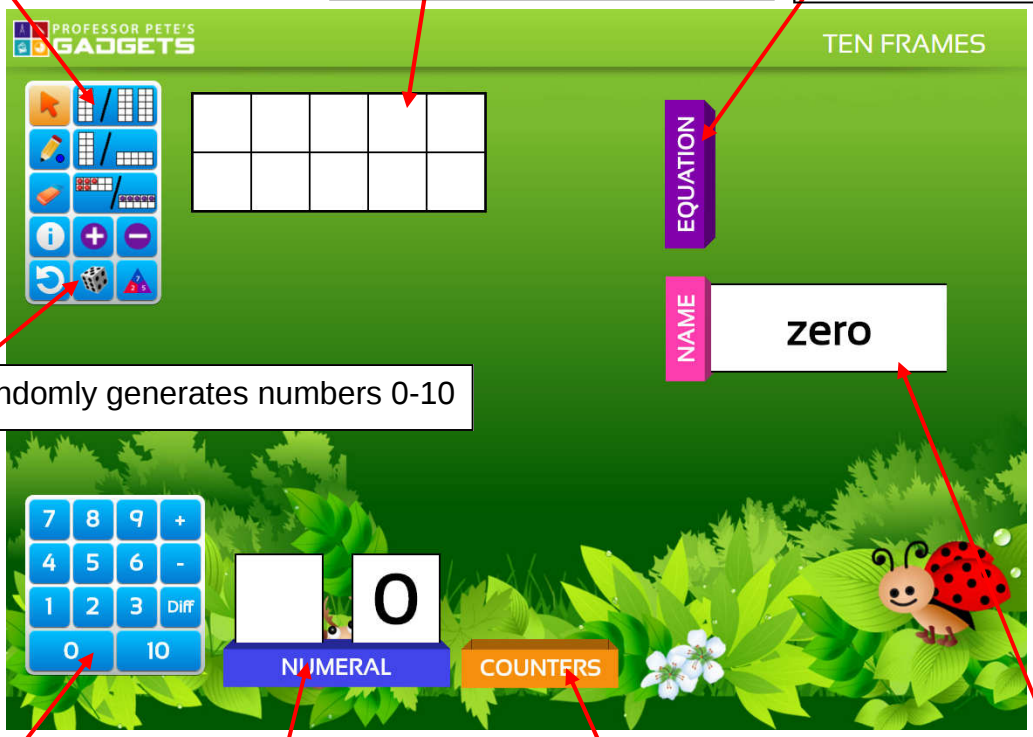
DO NOT progress on to the new numbers if the students cannot subitize the numbers 0-7. There is no need to rush, rather it is better that the students really know their numbers before moving on each day.

Toolbox: Check default settings

- Single ten frame
- Horizontal layout
- Rows arrangement (purple counters)

Ten Frame: single frame

EQUATION: hide it (close it)



Dice: randomly generates numbers 0-10

Key Pad: for entering numbers

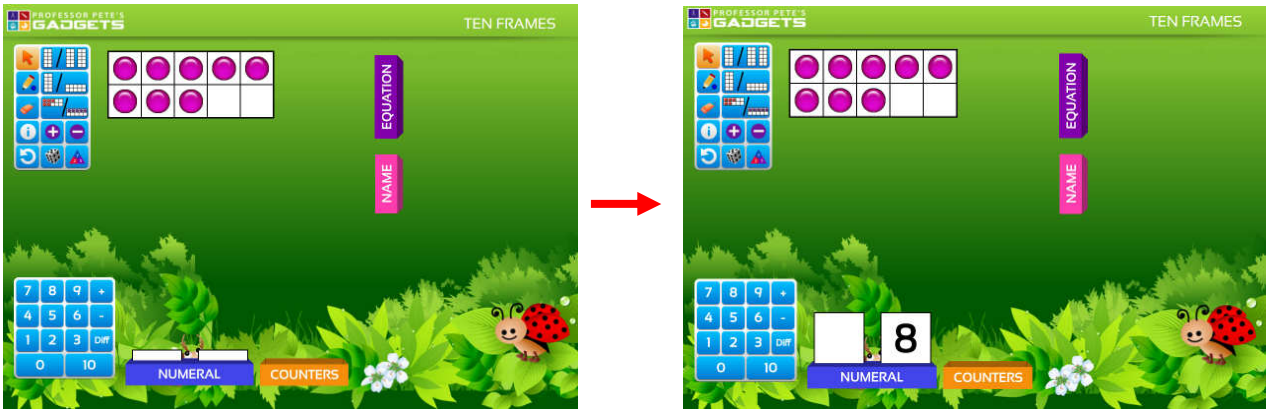
NUMERAL: hide or show the symbol form of the number

COUNTERS: hide or show the counters on the ten frames

NAME: hide or show the spelling of the number

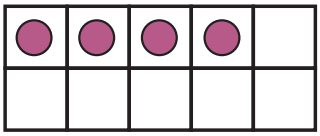
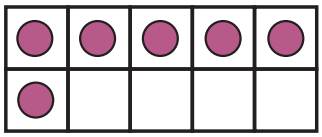
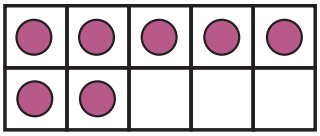
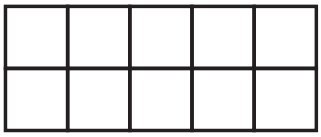
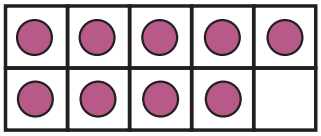
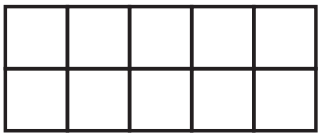
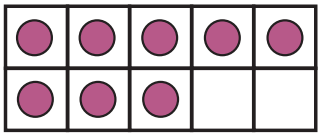
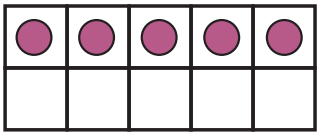
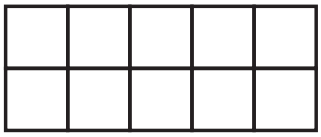
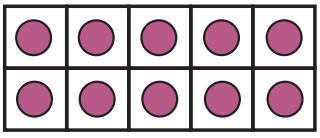
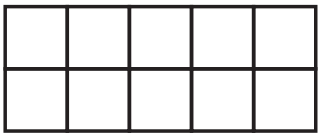
Lesson 2C Cont'd

- Close all boxes, keep the counters on screen.
- Revise numbers 0-7 from previous day.
- Enter the number 8 in the keypad.
- Ask students to say how many counters are on screen. If students cannot subitize it then ask them to count it. Refer to 7 and show them it is one more. Show the NUMERAL by opening to check response.



- Discuss features of the number such as:
  - Is it more than a full row of 5? Is it nearly 2 rows?
  - See that 9 is one more than 8 (count them).
  - What happens if we put one more on there (count on one)?
  - How many are missing from making a full ten frame?
  - Have students write the numeral on the worksheet. Can they find that number and then trace and write their own number to complete the line?
  - Ask students to show you this number on their ten frame.
- Repeat this line of questioning with 9 and 10 (a full ten frame!) .
- Continue showing students the ten frames from 0-10 until they can instantly recall the number on the ten frame without the NUMERAL showing. Subitizing these numbers is crucial before progressing.
- Close the COUNTERS and open the NUMERAL. Show students a numeral and have them show you that number on their ten frames. Have them say the number.
- Open the NAME box and show how the word is written and have them write the name on the worksheet (if students are ready for this step).

Recognizing numbers to 10

Write the number.		Draw the dots.	
	4		6
			0
			8
			10
			7
			9

Recognizing numbers to 10

8 8 8 8 8 8 8 8 8

7 7 7 7 7 7 7 7 7

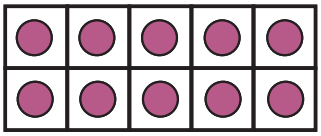
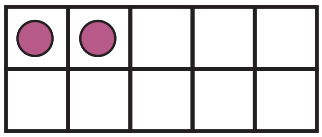
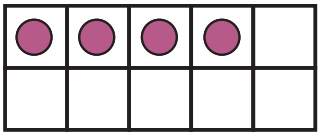
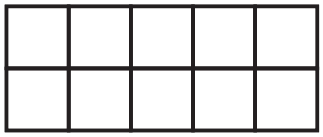
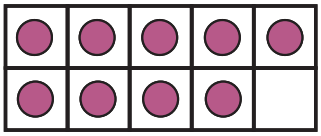
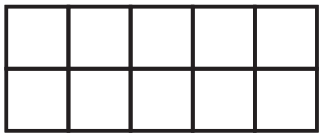
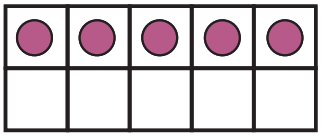
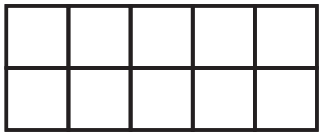
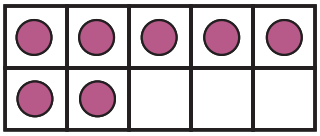
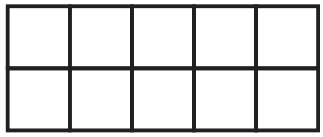
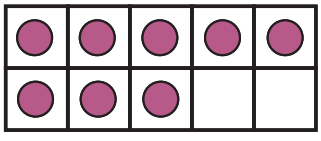
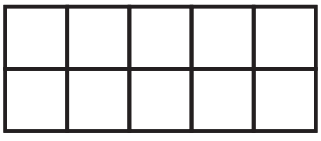
9 9 9 9 9 9 9 9 9

4 4 4 4 4 4 4 4 4

2 2 2 2 2 2 2 2 2

10 10 10 10 10 10

Recognizing numbers to 10

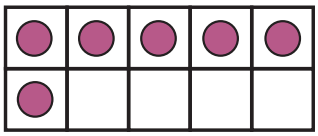
Write the number.		Draw the dots.	
	10		2
			3
			9
			8
			6
			7

eight	eight	eight
nine	nine	nine
ten	ten	ten
seven	seven	seven
five	five	five
zero	four	six

Recognizing numbers to 10

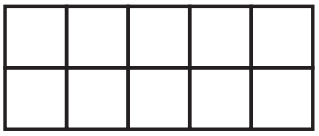
Fill in the missing numbers, dots or words to make them match.

Don't forget to <u>say</u> the number as well.

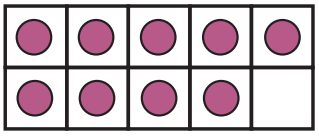


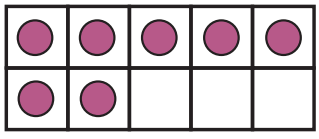
six

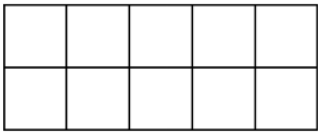
6



nine







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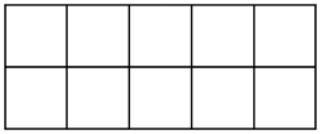

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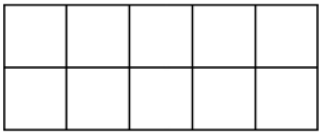


five

Lesson 2D

To explore numbers one more and one less than numbers 0 - 10, make sure that the following options are selected.

DO NOT progress on to the new numbers if the students cannot subitize the numbers 0-10. There is no need to rush, rather it is better that the students really know their numbers before moving on each day.

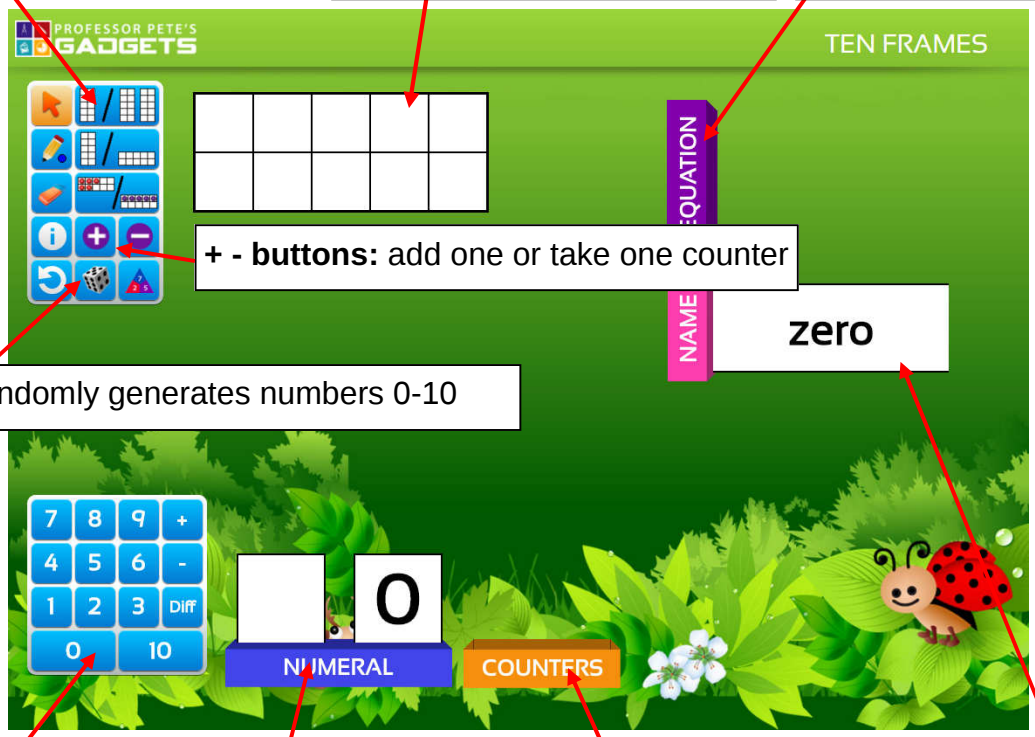
Use the  buttons to find one more or one less.

Toolbox: Check default settings

- Single ten frame
- Horizontal layout
- Rows arrangement (purple counters)

Ten Frame: single frame

EQUATION: hide it (close it)



+ - buttons: add one or take one counter

Dice: randomly generates numbers 0-10

Key Pad: for entering numbers

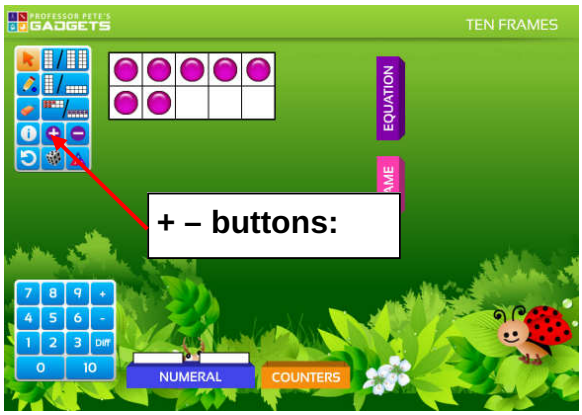
NUMERAL: hide or show the symbol form of the number

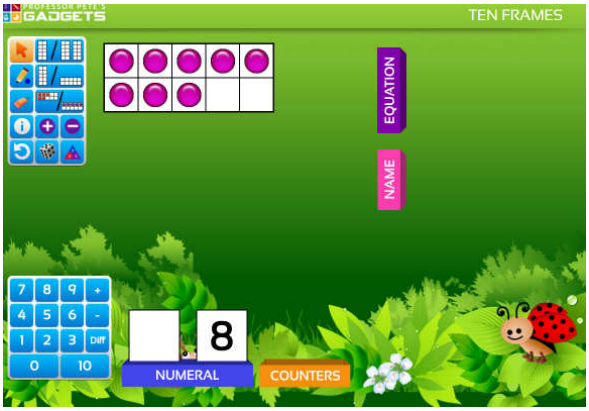
COUNTERS: hide or show the counters on the ten frames

NAME: hide or show the spelling of the number

Lesson 2D Cont'd

- Close all boxes, keep the counters on screen.
- Revise numbers 0-10 from previous day.
- Enter a number 7 in the keypad.
- Ask students to say how many counters are on screen. Confirm there are 7 counters.
- Add one more counter.  Ask how many counters on the screen now. Show the NUMERAL by opening it to check their response.



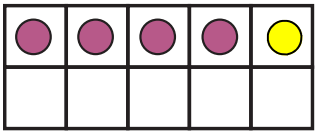


- Discuss relationship between 7 and 8:
  - Have students repeats statements such as "One more than 7 is 8", "8 is one more than 7"
  - Count the counters if students cannot see this clearly.
  - This activity is to establish the concept. Do not use the "+" sign at this stage.
  - Have students write the numeral on the worksheet.
  - Ask students to show you this number on their ten frame then add one more counter.
  - Repeat using the random dice generator and then ask "What is one more than this number?"
- Repeat using the random dice generator and then ask "What is one more than this number?"
- Repeat above with "one less than" questions.
- Continue asking students for the number "one more than", "one less than" the numbers shown until students can say quickly and confidently "7 is one more than 6" etc.
- Close the COUNTERS and open the NUMERAL and ask them to tell you what one more than / one less than that number.
- **Worksheet activities:** Complete only some of them. Remember you do not need to do all the activities but choose the best ones most suitable for your students. Alternatively you could use the extra worksheets for early finishers.

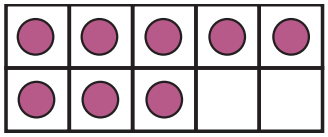
One more than

Use the ten frame to help you find one more than this number.
Draw one more dot and write the number.

One more than 4 is ☐



One more than 8 is ☐



One more than 1 is ☐

One more than 5 is ☐

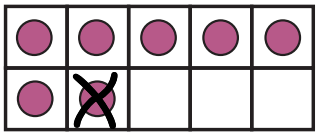
One more than 9 is ☐

One more than 7 is ☐

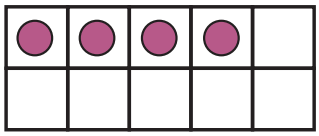
One less than

Use the ten frame to help you find one less than this number.
Cross off one dot and write the number.

One less than 7 is ☐



One less than 4 is ☐



One less than 10 is ☐

One less than 1 is ☐

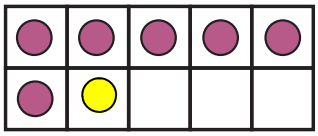
One less than 9 is ☐

One less than 8 is ☐

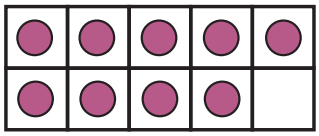
One more than

Use the ten frame to help you find one more than this number.
Draw one more dot and write the number.

One more than 6 is ☐



One more than 9 is ☐

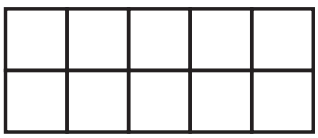


One more than 2 is ☐

One more than 4 is ☐

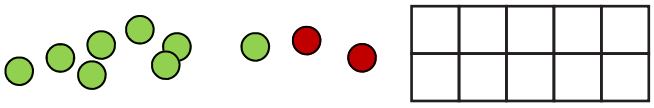
One more than 3 is ☐

One more than 8 is ☐



One more than / One less than

Use your ten frame and counters to help you find one more or one less than each of the numbers.



One more than 8 is ☐

One more than 1 is ☐

One more than 7 is ☐

One more than 5 is ☐

One less than 8 is ☐

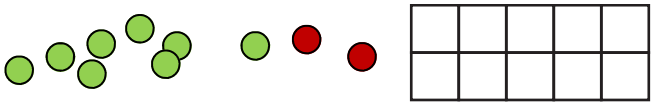
One less than 6 is ☐

One less than 9 is ☐

One less than 1 is ☐

One more than / One less than

Use your ten frame and counters to help you find one more or one less than each of the numbers.



One more than 5 is ☐

One more than 7 is ☐

One more than 4 is ☐

One more than 9 is ☐

One less than 5 is ☐

One less than 7 is ☐

One less than 4 is ☐

One less than 9 is ☐

Lesson 2E

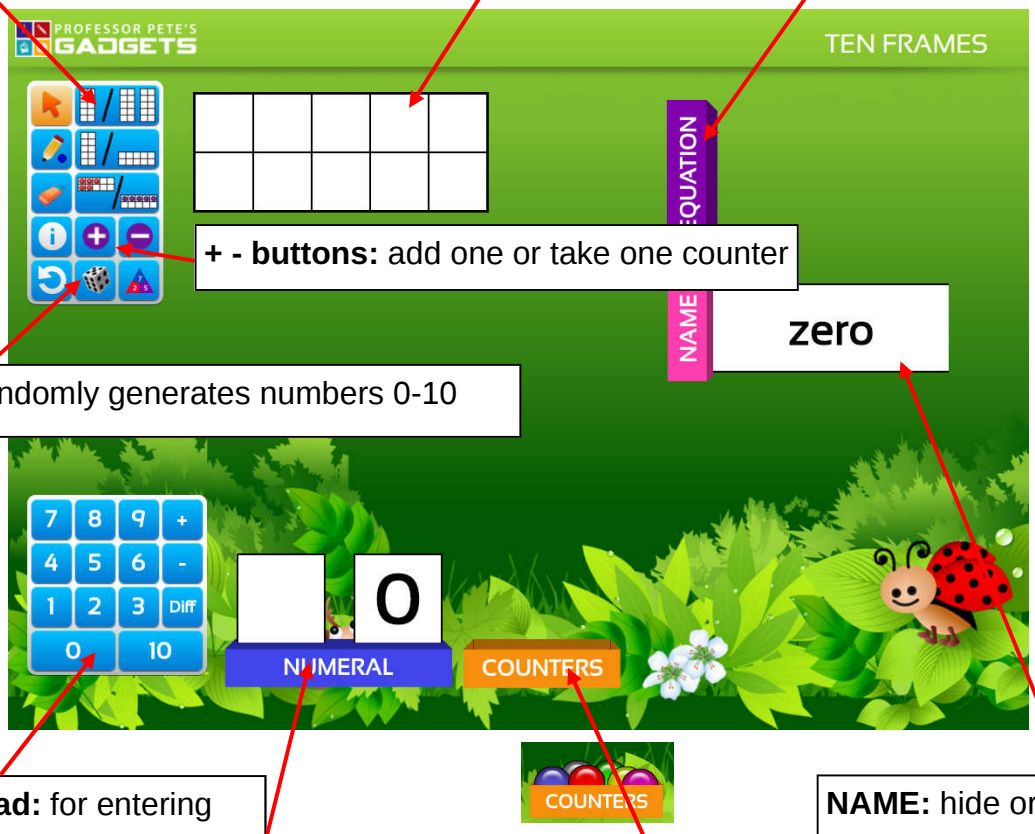
To explore the numbers 0 - 10, establishing their relationship to 5 (half 10) or to 10.
Use the random dice button to select a number.
Focus on the counters in the ten frame.
Discuss that 5 is a full top row and is half of 10.
Have students consider if the number is more than 5 or less than five.
Discuss missing counters that would make a full ten frame.

Toolbox: Check default settings

- Single ten frame
- Horizontal layout
- Rows arrangement (purple counters)

Ten Frame: single frame

EQUATION: hide it (close it)



+ - buttons: add one or take one counter

Dice: randomly generates numbers 0-10

Key Pad: for entering numbers

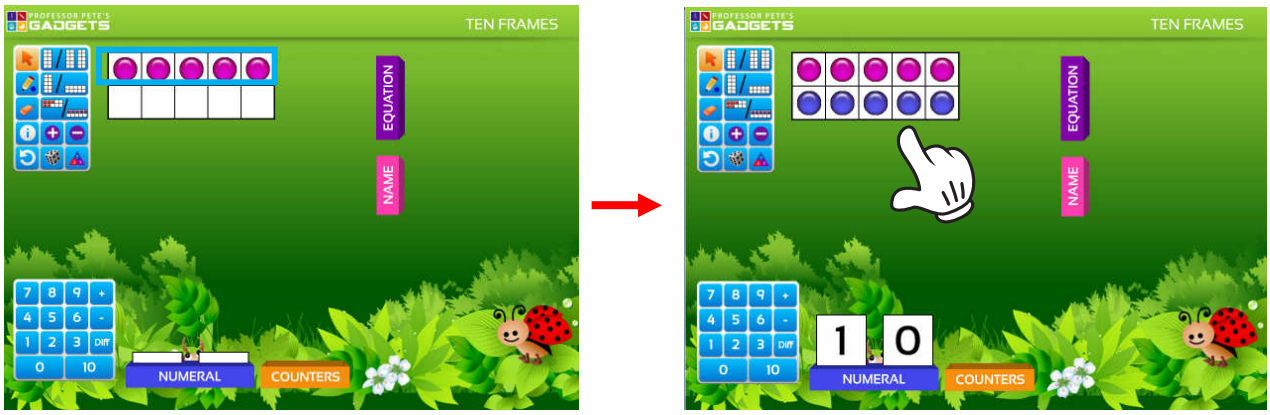
NUMERAL: hide or show the symbol form of the number

COUNTERS: hide or show the counters on the ten frames

NAME: hide or show the spelling of the number

Lesson 2E Cont'd

- Close all boxes, keep the counters on screen.
- Choose the number 5.
- Ask students to say how many counters are on screen. Open the NUMERAL box to confirm response.
- Draw students' attention to the top full row that is 5. Ask "If we filled all the bottom row of the ten frame as well, how many would there be?" Check students response by entering "+5" in the keypad.

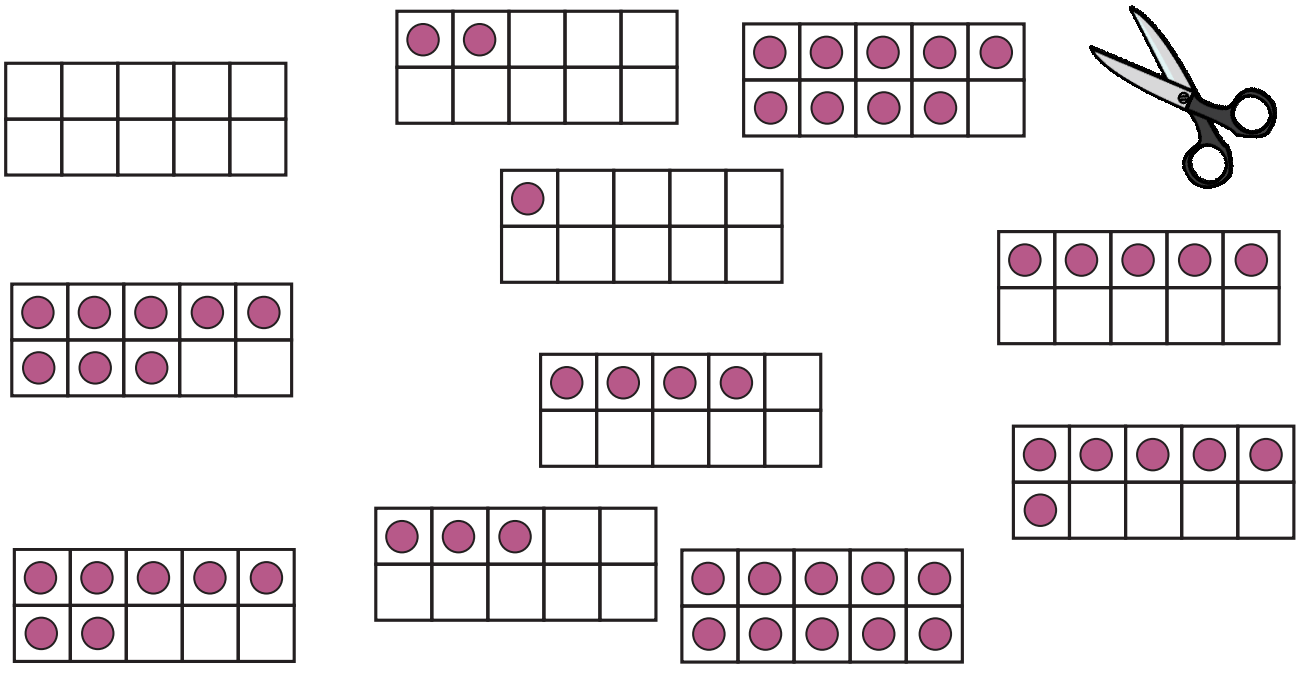


- Clear the screen and count on one (from the zero). As you count discuss the number and that these numbers are smaller than five. As you count, ask students to tell you when you have reached 5. That is half ten. It is halfway to ten.
- Continue counting on and note the numbers now are larger than 5. How many are they larger by?
    - 6: have students say 6 is one more than 5.
    - 7: Have the students tell you how many more than 5 there are.
    - Continue pattern drawing students' attention to the bottom row of the ten frame.
    - Have students complete the worksheets. Allow students to use the ten frames if necessary.
- Close the COUNTERS and open the NUMERAL box and ask the students to tell you whether the number is greater or less than 5. If the number is greater than 5, ask how many it is greater by. (Do not ask them to identify how many less than 5 a number such as 3 is. The purpose of this activity is to have students notice the pattern that the numbers 1-5 are repeated in the bottom row.)
- **Worksheet activities:** Complete only some of them. Remember you do not need to do all the activities but choose the best ones most suitable for your students. Alternatively you could use the extra worksheets for early finishers.

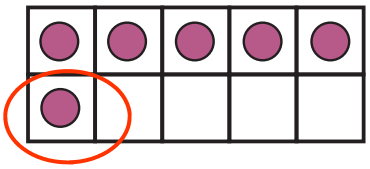
Recognizing numbers to 10

Cut and sort the numbers so that they are in the right section.

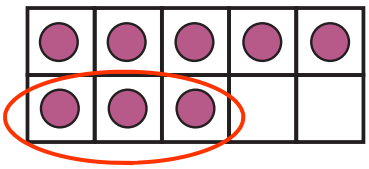
Paste the numbers up to 5 (and including 5) here. Put them in order.	Paste the numbers greater than 5 here. Put them in order.



Circle and write how many more than 5 there are in each number.



6 is _____ more than five.



_____ is _____ more than five.

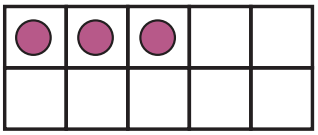
7 is _____ more than five.

9 is _____ more than five.

Recognizing numbers to 10

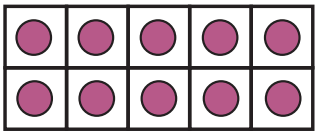
Fill in the missing numbers, dots or words to make them match.

Don't forget to <u>say</u> the number as well.

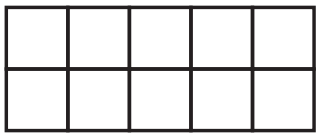


three

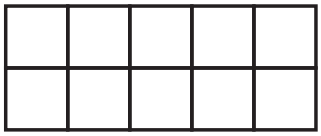
3



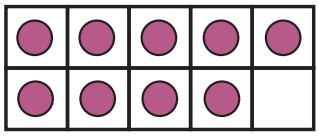
5



six

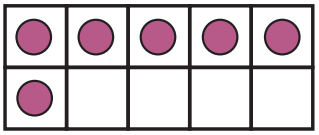


seven



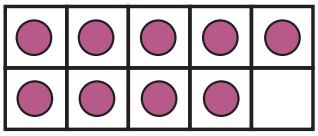
4

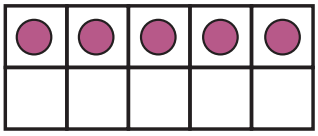
Recognizing numbers to 10

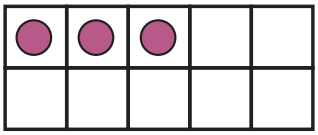


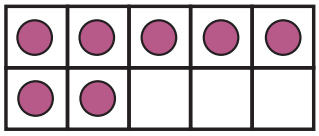
six

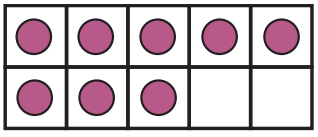
6

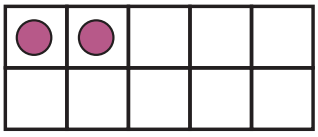






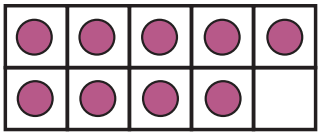
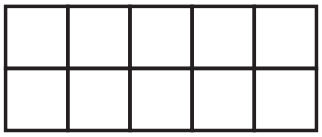
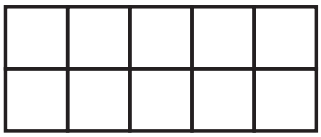
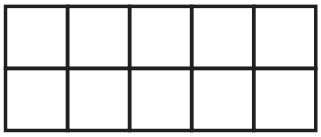
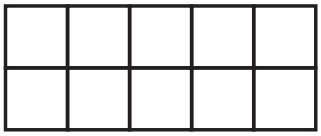
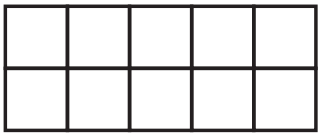
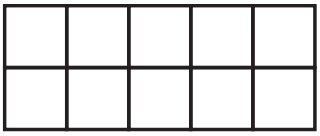




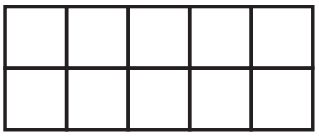
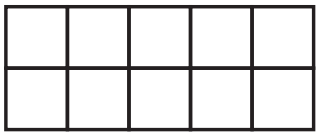
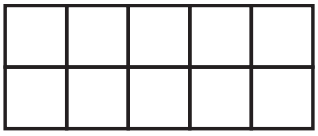
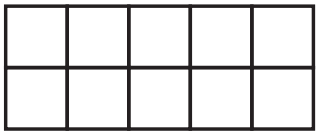
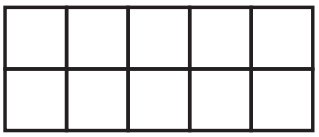
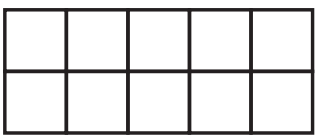
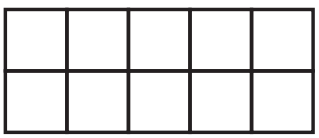


Recognizing numbers to 10

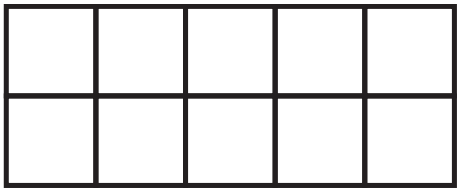
Template Instructions: : Draw in the dots or write in a number, then have students complete the rest to match.

Write the number.		Draw the dots.	
	9		8
			
			
			
			
			

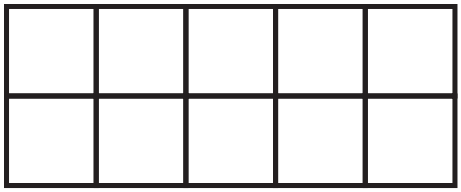
Template Instructions: Draw dots, write the number or write the number name on the line and have students complete the rest.

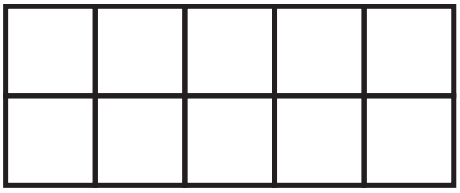
Template Instructions: Write 1 or 2 "more than" or "less than" and have students draw the dots then add more dots or cross off the dots to complete it.



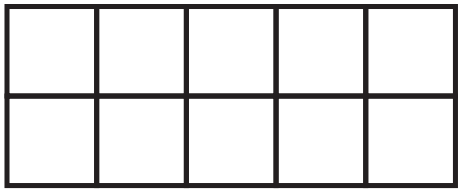
_____ than ____ is ☐



_____ than ____ is ☐



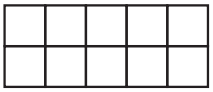
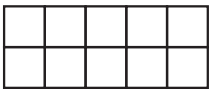
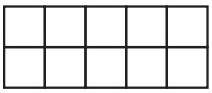
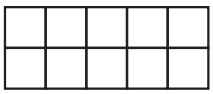
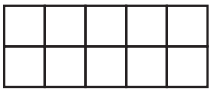
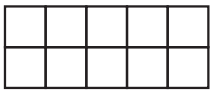
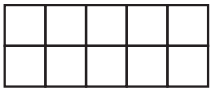
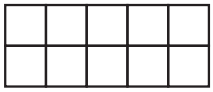
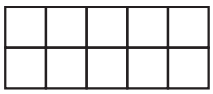
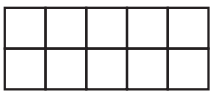
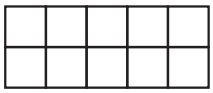
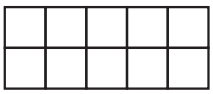
_____ than ____ is ☐



_____ than ____ is ☐

Template Instructions: Draw or write in one section and have students complete it.

Write whether the number is odd or even.

 _____	 _____
 _____	 _____
 _____	 _____
 _____	 _____
 _____	 _____
 _____	 _____