

#### **Information**



#### Common core icons



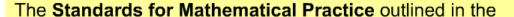
This icon indicates a slide where the Standards for Mathematical Practice are being developed. Details of these are given in the Notes field.



Slides containing examples of mathematical modeling are marked with this stamp.



This icon indicates an opportunity for discussion or group work.



Common Core State Standards for Mathematics describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

#### These are:

- 1) Make sense of problems and persevere in solving them.
- 2) Reason abstractly and quantitatively.
- 3) Construct viable arguments and critique the reasoning of others.
- 4) Model with mathematics.
- 5) Use appropriate tools strategically.
- 6) Attend to precision.
- 7) Look for and make use of structure.
- 8) Look for and express regularity in repeated reasoning.



This icon indicates that the slide contains activities created in Flash.



This icon indicates teacher's notes in the Notes field.



# Hannah's pencil case





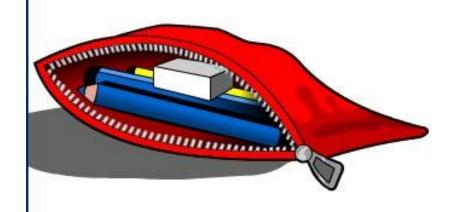






## Hannah's pencil case

How many pencils are there in Hannah's pencil case?







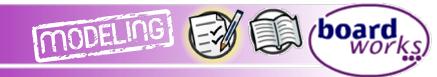






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## Jake's muffins



Jake buys a box of 10 muffins. Let's have a look inside.



Jake's box of 10 muffins contains ten single units.





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#### Numbers 11 to 19



#### How could we think about numbers higher than 10?

eleven 11

10 1

twelve 12

10 | 1 | 1

thirteen 13

10

1 1

1

fourteen 14

10

1

1

1

We can think of numbers between 11 to 19 as groups containing one ten and a different number of ones.





## **Numbers 11 to 19 activity**







#### Match each number to its correct pair

twelve 12

nineteen 19

fourteen 14

sixteen 16

10 111111

10 11

10 111111111

10 1111











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## **Twenty**



How could we think about the number twenty, 20?

twenty 20

10

one ten and ten ones

twenty 20

two tens

Which is the best way to think about twenty?

How could you think about **thirty**, **30**?

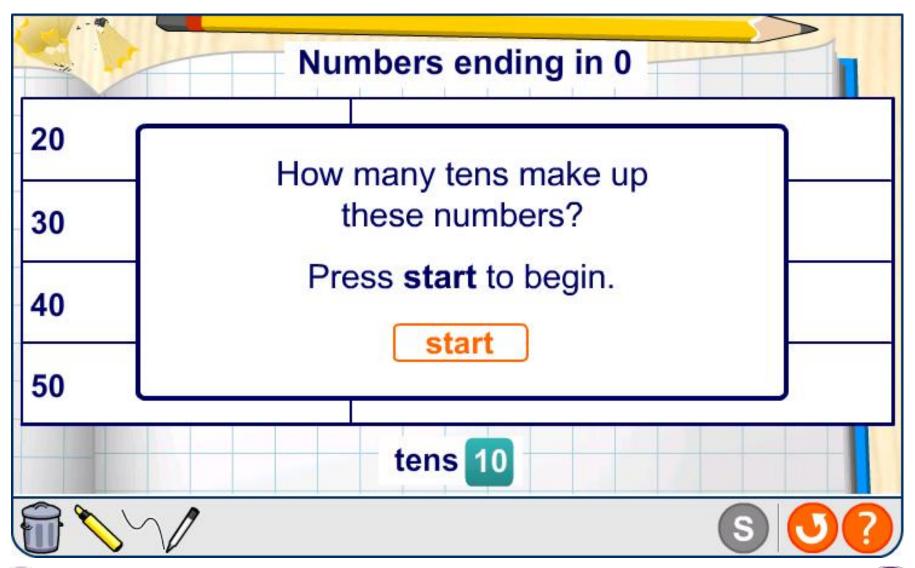




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# Numbers ending in 0





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## Thinking about numbers



# Thinking about numbers

How many **tens** and **ones** are these numbers made of? Press on the numbers to reveal the answers.

Press start to begin.

start

32

2









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## **Comparing numbers**



#### How can we tell if one number is bigger than another?

We can compare the tens and ones in each number.

Which of these numbers is bigger?

twelve, 12 fourteen, 14

10 1 1 1 1 1 1

Fourteen has more ones than twelve, so **fourteen** is bigger than twelve.





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#### Tens or ones?





### Which of these numbers is bigger?

twenty three, 23

eighteen, 18

10

10

1

1 | 1

10

1

1

1

1

1

|| 1



23 has **more tens** than 18, but **fewer ones**. I think 23 is largest because tens are bigger than ones.

Is Alex correct?

Alex is correct. The number with the most tens is **always** the largest.





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# Number signs







## Comparing numbers using signs

We can use three signs to compare numbers.











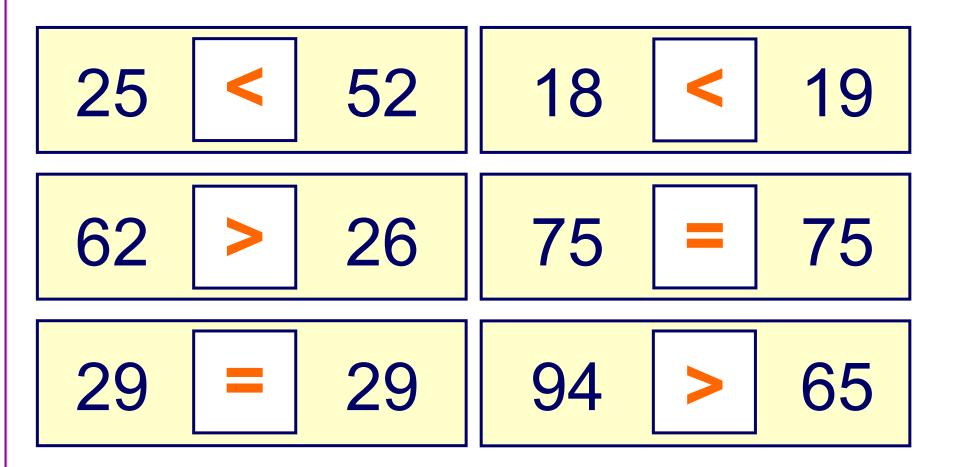
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## Number signs practice





Add the correct sign for each box.

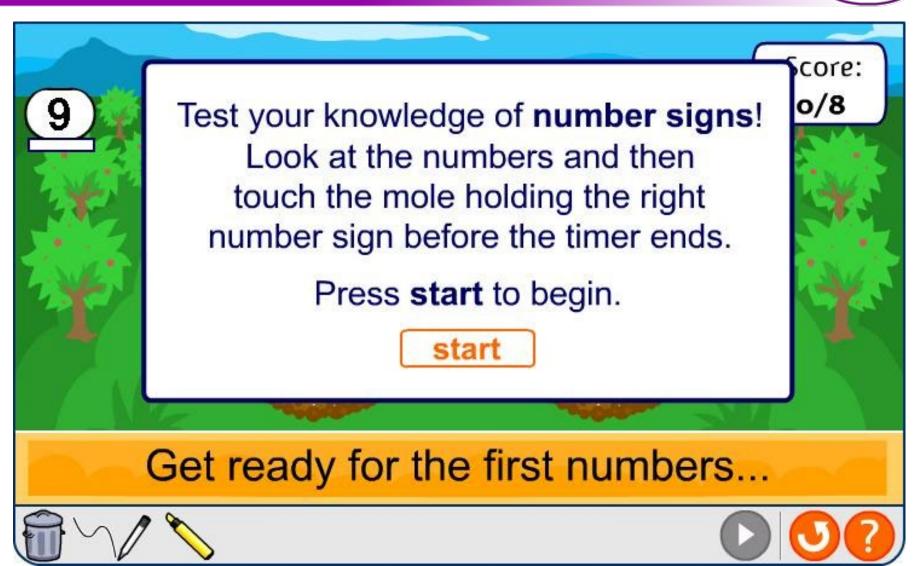






#### Whack-a-mole





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