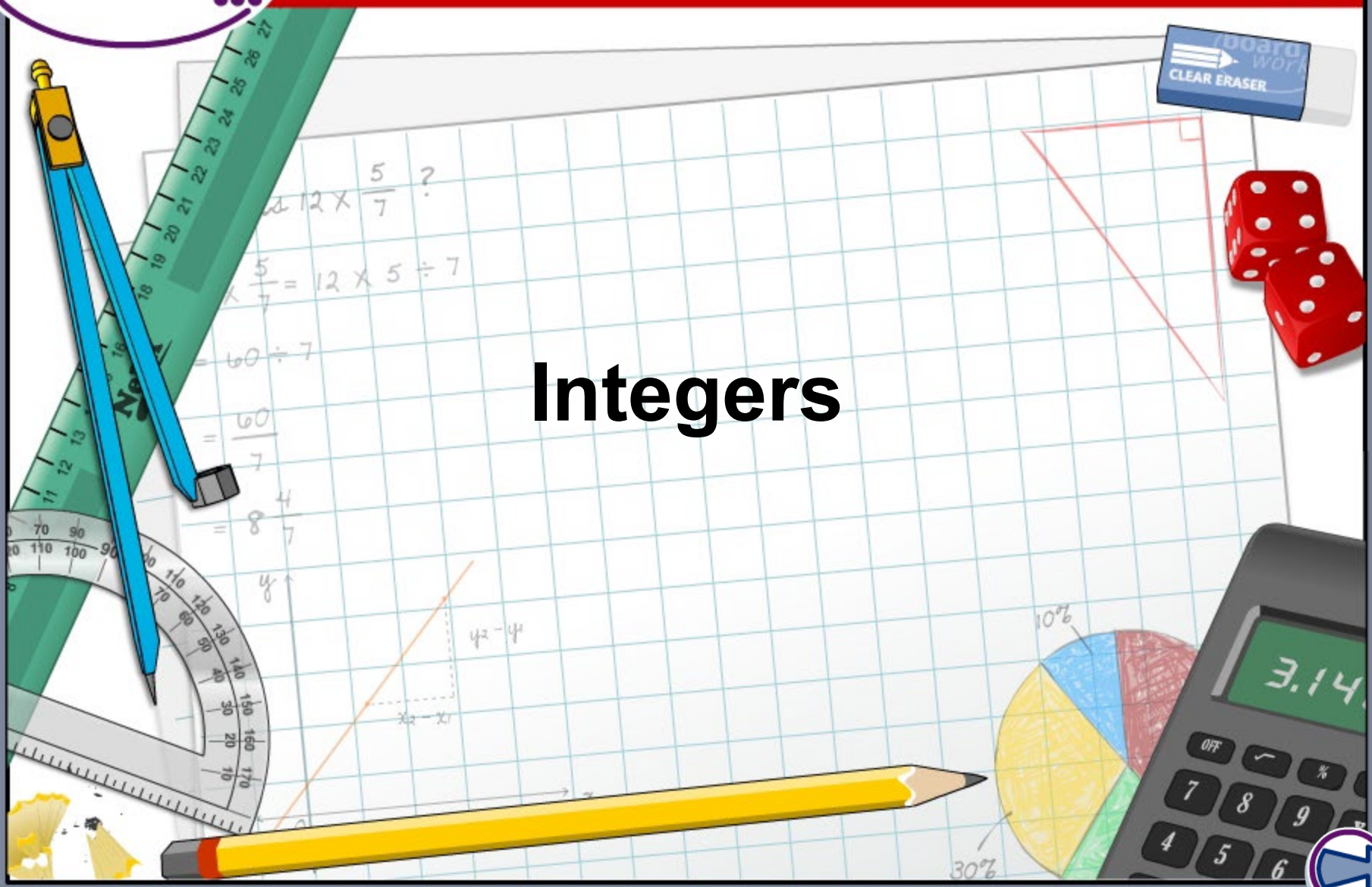

Integers

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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.

The **Standards for Mathematical Practice** outlined in the 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. These activities are not editable.

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

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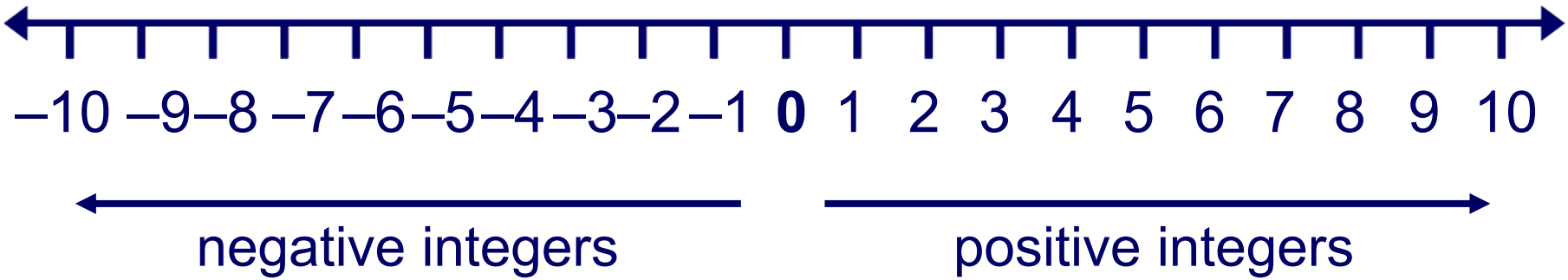
Introducing integers

Integers are whole numbers.



Integers can be **positive** or **negative**. Zero is also an integer.

Decimals and fractions are **not** integers.

Which of the following numbers are integers?

17 120,945 80.5 –695 0 $2\frac{3}{4}$ 99 –0.9

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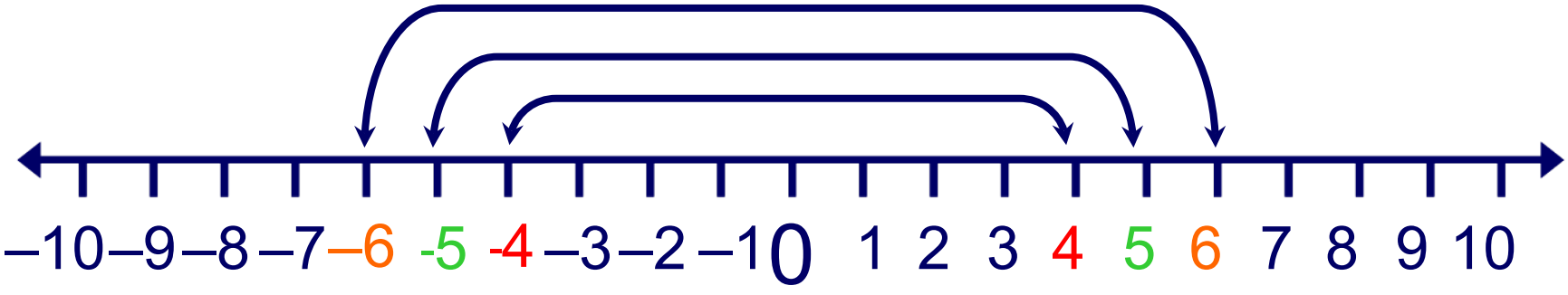
Opposites

Each integer has an opposite on the other side of zero.



What is the opposite of 620,050?

–620,050

What is the opposite of the opposite of 620,050?

620,050

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The integer zero

Discuss these questions in class, or in groups.

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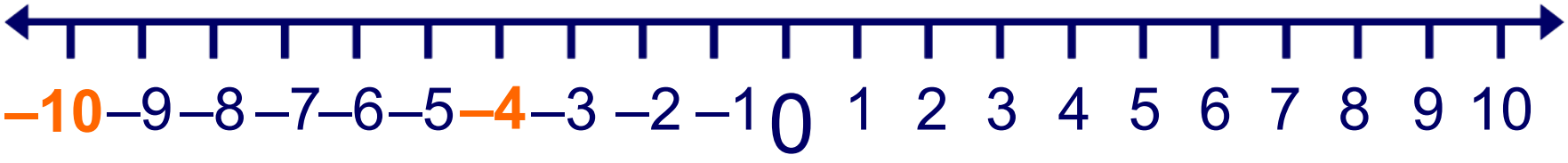
Ordering negative integers

Which number is the largest: –10 or –4?



Numbers on the right of a number line are **always** larger than numbers to the left, no matter whether they are negative or positive. Therefore, –4 is **larger** than –10.

Which of these numbers is the smallest?

–1 –687 –46 **–1,850** –360 –12

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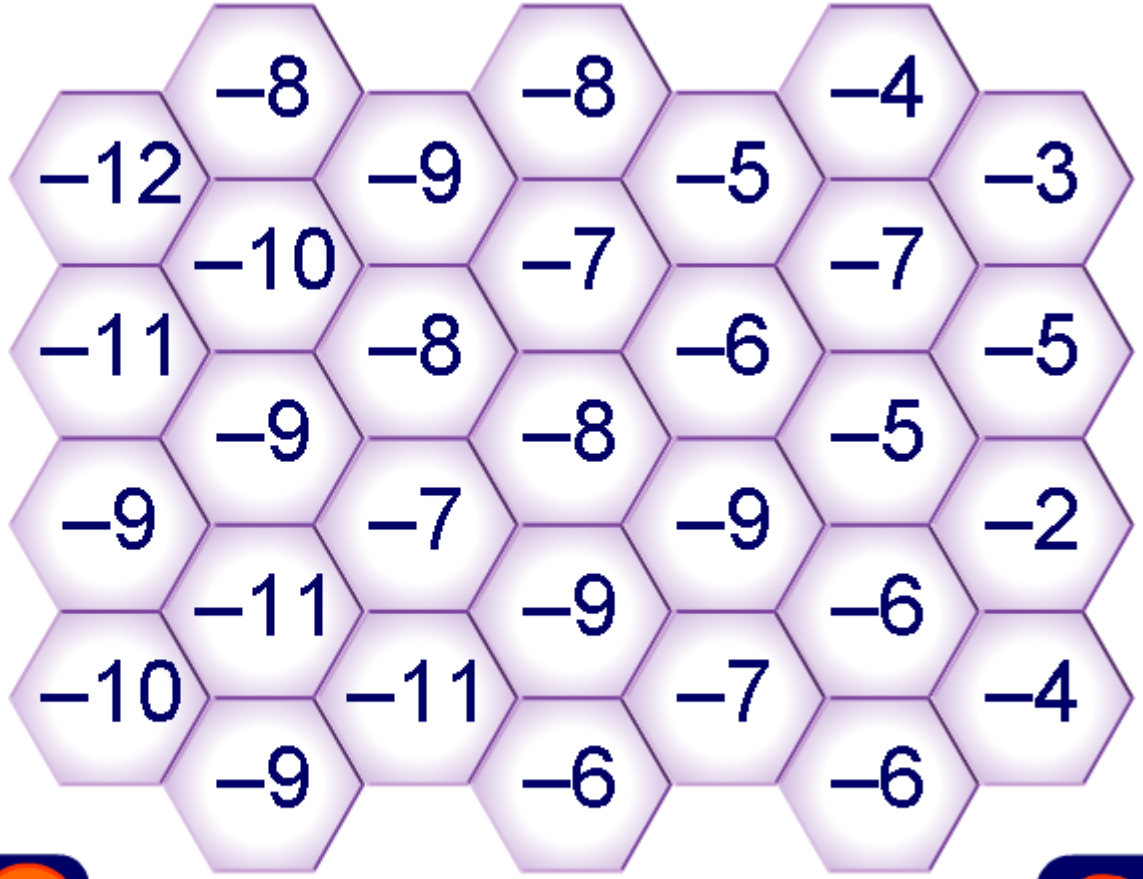
Ordered paths

Find a path from left to right in ascending order.



0 1 2
Decimal places

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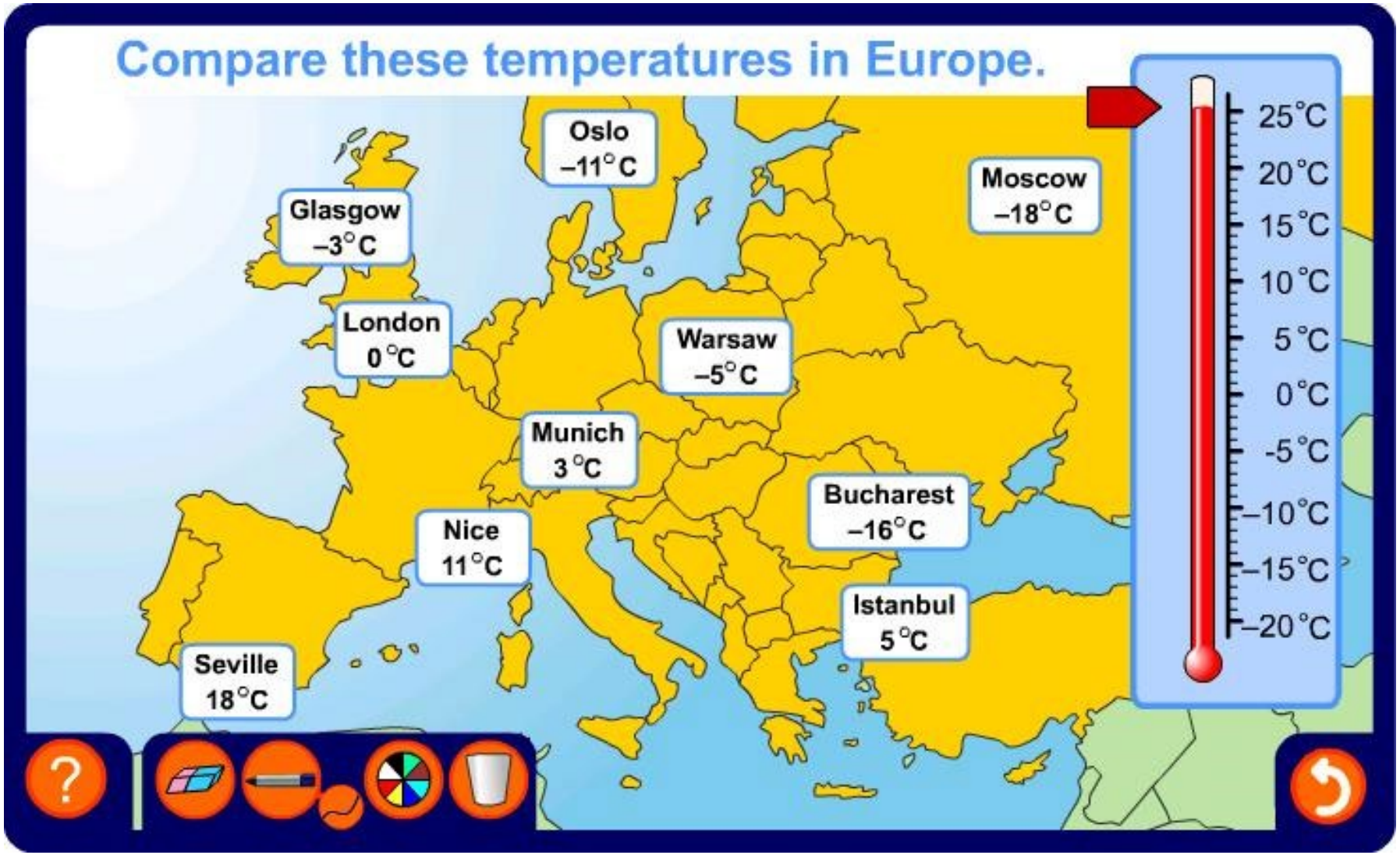
Comparing temperatures



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Integers at the school cafeteria

Taylor has **$–5** in her lunch account at the start of the week. She can only buy lunch if her account balance is positive.

Taylor adds $5 to her account.

1. What is the value of her account balance now?

2. What can she buy on the menu?

3. How much more would she need to add before she can buy a banana?

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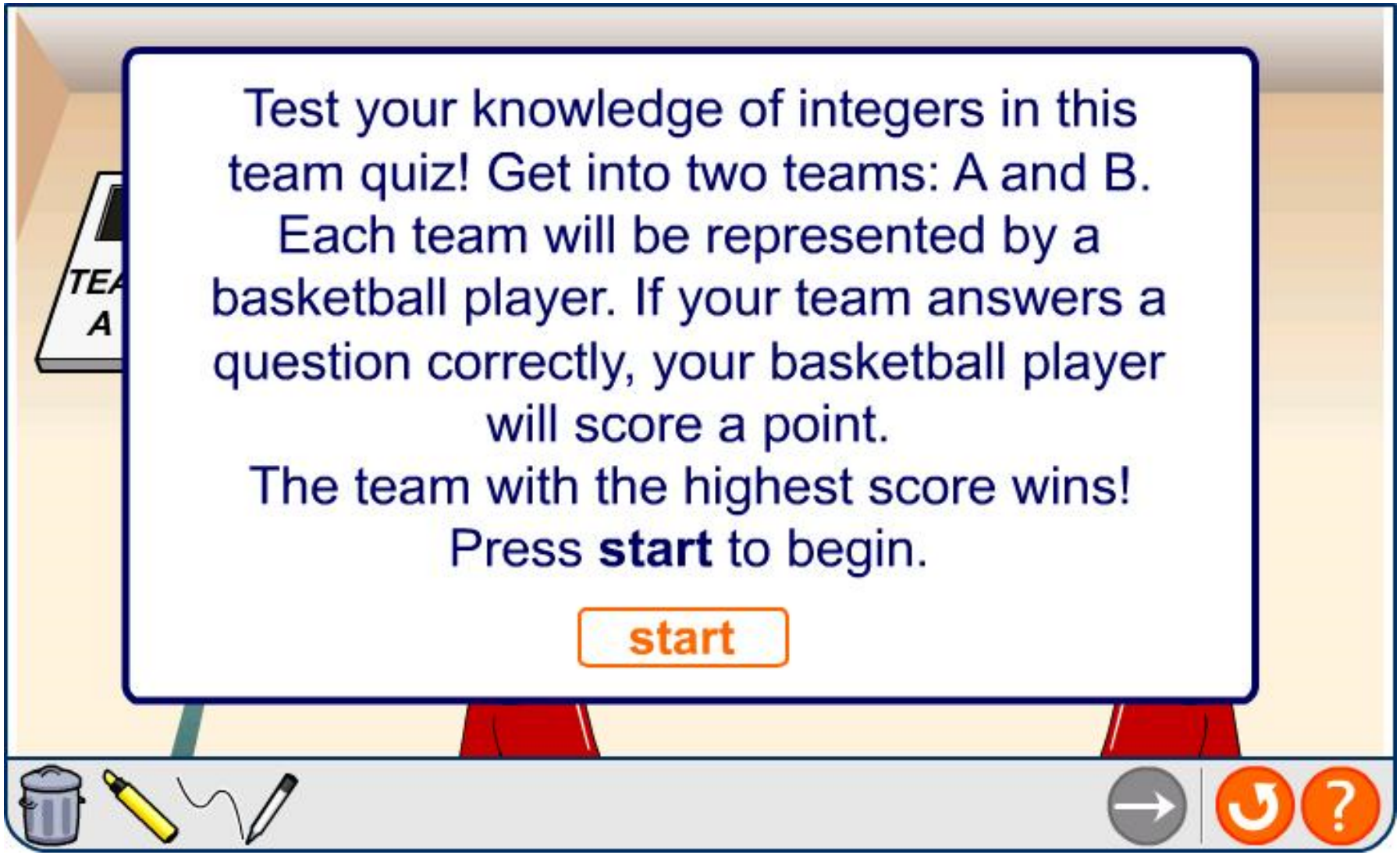
Integers basketball



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