

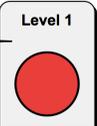
## Fractions Screen

This screen contains eight levels of matching fractions using the improper fraction representations for fractions greater than 1.

**Levels 1-2** only use fractions that are less than 1

Fractions: Choose your level!

Level 1



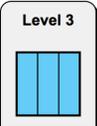
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Level 2



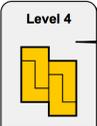
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Level 3



☆☆☆☆

Level 4



☆☆☆☆

Level 5



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Level 6



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Level 7



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Level 8



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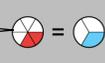
**Levels 3-6** use fractions less than 2

**SEE** your best score (represented by stars) for any levels

**Levels 7-8** only use fractions greater than 1 and less than 2

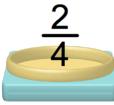
**KEEP** track of all correctly matched fractions

My Matches

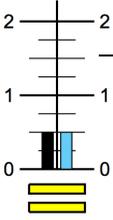


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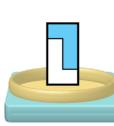


$\frac{2}{4}$



2  
1  
0

Level 2  
Score: 3



$\frac{1}{3}$



+1  
OK







$\frac{1}{3}$



$\frac{3}{6}$







**GET** feedback about the values of your fractions in a number line representation

**RETURN** to the level selection screen

**DRAG** different representations of the fractions up to the scales and check if they are equivalent

## Mixed Numbers Screen

This screen contains eight levels of matching fractions using the mixed number representation for fractions greater than 1.

**Levels 1-2** use mixed number fractions that are less than 2, and the numerator of the fraction will always be equal to 1.

**Levels 3-6** use fractions less than 2.

**Levels 7-8** only use fractions greater than 1 and less than 2.

The screen includes a 'Fraction Matcher' title, a 'PhET' logo, and navigation icons for 'Fractions', 'Mixed Numbers', and 'Home'. There are also icons for a timer and sound control.

## Insights into Student Use

- Students can work at any level on any screen, but it can be helpful to differentiate instruction by assigning certain levels.
- The timer is *off* by default but can be turned on for students to measure their speed on a given level.
- The sound is *on* by default but if you are working with multiple computers in one room you may want to ask students to turn it off.



## Suggestions for Use

### Group Work

- If two fractions are equivalent, what does the number line representation look like?
- If two fractions are *not* equivalent, what does the number line representation look like?
- What strategies help you match two fractions? How can you use these strategies to determine if  $5/8$  and  $10/13$  are equivalent?

See all published activities for Fraction Matcher [here](#).

For more tips on using PhET sims with your students, see [Tips for Using PhET](#).