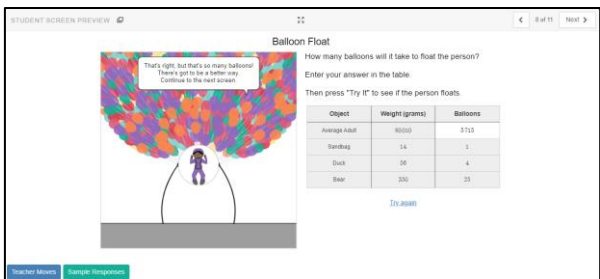
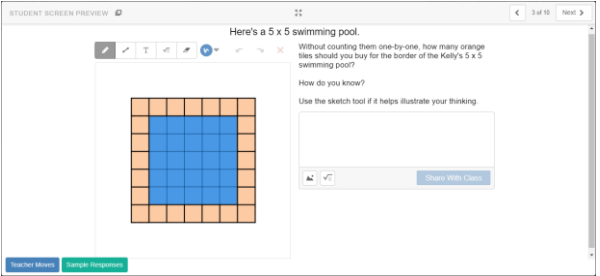
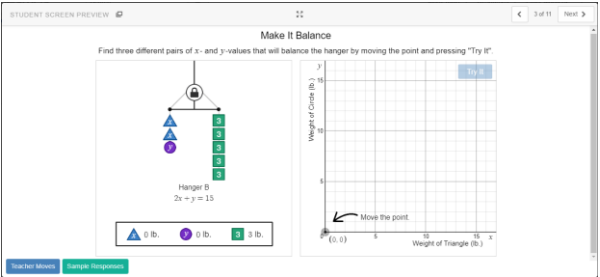
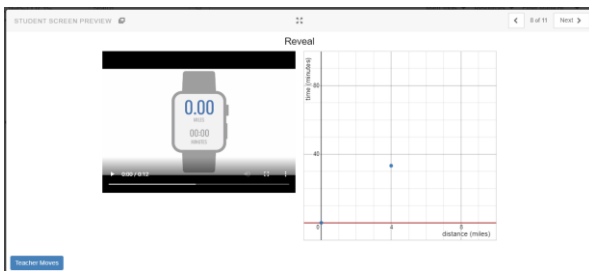


Sample Relationships and Variables Resources ([Desmos.com](https://www.desmos.com))

Using digital manipulatives for illustrative purposes and can evoke curiosity and creativity when used by students to investigate mathematical concepts. Desmos can be used to create and/or source activities which students can explore through manipulation. The potential for manipulatives to support student learning lies not within the objects or tools themselves but in how students engage with the manipulatives and the relevant mathematics.

This document has some sample Desmos resources for use with your students. Please see the Desmos [section](#) of our website for screencasts on using the suite of Desmos resources at [Desmos.com](https://www.desmos.com).

 <p>Please click here for link to resource.</p>	<h3>Balloon Float</h3> <p>Author: Desmos</p> <p>Students use ratios to determine the number of balloons needed to float different objects.</p>
 <p>Please click here for link to resource.</p>	<h3>Pool Border Problem</h3> <p>Author: Desmos</p> <p>In this classic math problem, students construct expressions to determine the number of tiles that border a pool.</p>
 <p>Please click here for link to resource.</p>	<h3>Make Them Balance</h3> <p>Author: Desmos</p> <p>This activity uses hangers to explore solutions to linear equations and systems of linear equations.</p>

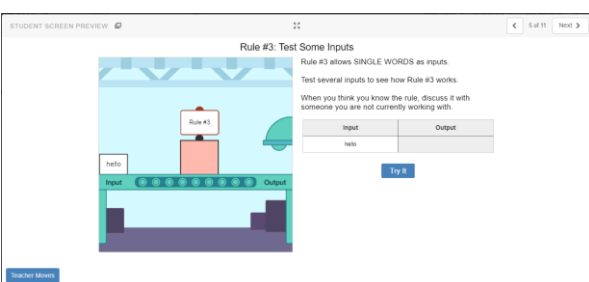


Please click [here](#) for link to resource.

The Running Game

Author: Desmos

In this activity, students use proportional reasoning to predict how long it will take someone to run seven miles. Students consider the meaning of several graph features in context.

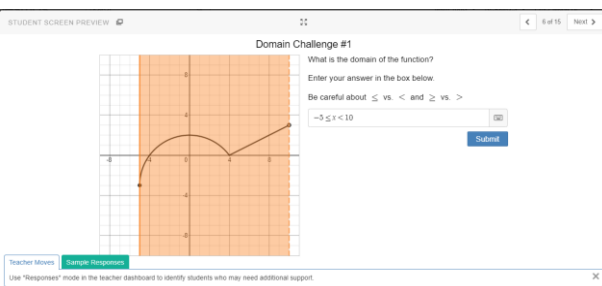


Please click [here](#) for link to resource.

Guess My Rule

Author: Desmos

Students are introduced to the concept of a function by using input-output pairs in a table and explore a variety of relations.

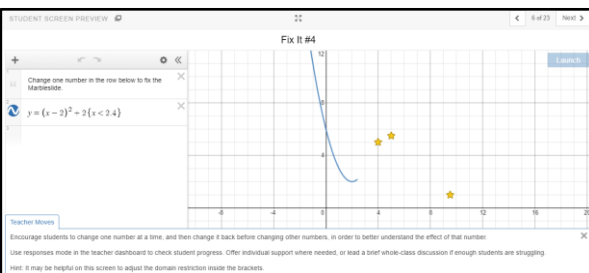


Please click [here](#) for link to resource.

Domain and Range Introduction

Author: Desmos

In this activity, students find the domain and range of various functions and develop their understanding of the application of inequalities in this context.



Please click [here](#) for link to resource.

Marbleslides: Parabolas

Author: Desmos

In this challenging activity, students transform parabolas so that the marbles go through stars that have been placed on the plane. Students test their ideas by launching the marbles and can revise their thinking before trying the next challenge.