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Resource ID#: 18474

Primary Type: Educational Game

Direct Link: http://nlvm.usu.edu/en/nav/frames_asid_161_g_1_t_1.html?open.instructions

Color Chips - Adding Integers

This virtual manipulative provides students with practice adding positive and negative integers. Students are given an addition problem and using one-to-one correspondence, the student is able to see what happens when adding negative integers. The addition problems can be computer generated or teacher generated and there is a free play mode which allows the student to practice with the chips and become familiar with the process of moving the chips around the page and creating a visual representation of an addition problem with integers.

General Information

Subject(s): Mathematics

Grade Level(s): 7

Intended Audience: [Educators](#), [Students](#), [Parents](#)

Instructional Time: 30 Minute(s)

Keywords: integers, adding, negative, zero pair

Instructional Component Type(s): [Educational Game](#), [Virtual Manipulative](#), [Teaching Idea](#)

Instructional Design Framework(s): [Demonstration](#)

Resource Collection: iCPALMS

Suggested Technology: Computer for Presenter, Computers for Students, Internet Connection, Java Plugin

Freely Available: Yes

Source and Access Information

Contributed by: Deborah Bass

Name of Author/Source: Utah State University

Is this Resource freely Available? Yes

Access Privileges: Public

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Aligned Standards

Name	Description
	Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. <ol style="list-style-type: none">Describe situations in which opposite quantities combine to make 0. For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.Understand $p + q$ as the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the

distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.

[MAFS.7.NS.1.1:](#)

d. Apply properties of operations as strategies to add and subtract rational numbers.

Clarifications:

Fluency Expectations or Examples of Culminating Standards

Adding, subtracting, multiplying, and dividing rational numbers is the culmination of numerical work with the four basic operations. The number system will continue to develop in grade 8, expanding to become the real numbers by the introduction of irrational numbers, and will develop further in high school, expanding to become the complex numbers with the introduction of imaginary numbers. Because there are no specific standards for rational number arithmetic in later grades and because so much other work in grade 7 depends on rational number arithmetic, fluency with rational number arithmetic should be the goal in grade 7.