Use this one for test practice! Language also

#35. ODD ONE OUT

Description

Odd One Out combines seemingly similar items and challenges students to choose which item in the group does not belong (Naylor et al., 2004). Students are asked to justify their reason for selecting the number, symbol, representation, or mathematical term that does not fit with the others.

How This Strategy Promotes Student Learning

Odd One Out provides an opportunity for students to access mathematical knowledge to analyze relationships between items in a group. By thinking about the similarities and differences, students are encouraged to use their reasoning skills in a challenging and engaging way. The FACT can be used to stimulate small-group discussion after students have had an opportunity to think through their own ideas. As students discuss their ideas in a group, they may modify their thinking or come up with ways to prove or disprove their ideas.

How This Strategy Informs Instruction

Odd One Out can be used at the beginning of instruction to find out what students already know about a mathematics topic. It can also be used during the development of conceptual understanding to examine the reasoning students use in comparing and contrasting the items on the list. Teachers can use this FACT to examine how their students make connections among concepts. The information is helpful in considering instructional experiences that can challenge students' misunderstandings.

Design and Administration

Select items that lend themselves to a grouping where one item justifiably does not fit with the others. Be sure to choose items and a relationship that is not immediately obvious in order to promote deeper thinking. Provide the list as a handout, overhead projection, chart, or set of cards. Alert students to what the topic of the *Odd One Out* is before they examine the items. Have students record their own answers and thinking before discussing their ideas with a partner or in small groups. Allow students enough time to discuss the various possibilities before homing in on "the odd one out." Figure 4.26 shows an example of an *Odd One Out* designed for middle school students learning about fractions.

Figure 4.26 Fractions Example for *Odd One Out*

Which is the "odd one out"? Circle the fraction in each set that does not belong				Explanation
3/4	15/20	8/9	33/44	
2/3	2/5	3/8	7/15	
2/7	8/9	4/10	1/5	
1/2	1/3	1/4	1/5	

General Implementation Attributes

Ease of Use: High
Time Demand: Medium
Cognitive Demand: Medium/High

Modifications

With younger children, provide three examples on cards and ask them to pick the card that does not belong.

Caveats

Make sure students are familiar with the words or representations used before they are asked to examine the relationship between them. Be aware that some students may choose a different odd one out, and correctly note relationships that you did not have in mind when you made up the examples and selected the odd one out.

Use With Other Disciplines

This FACT can also be used in **science*, social studies, language arts, health, foreign language, and visual and performing arts.

My Notes