

## Secondary Math Lesson Plan

Overview	Students will watch a video on TED that concern math and discuss the video's content and ideas. <a href="http://www.ted.com/talks/marcus_du_sautoy_symmetry_reality_s_riddle.html">http://www.ted.com/talks/marcus_du_sautoy_symmetry_reality_s_riddle.html</a>
Classroom	Secondary Mathematics Classroom
Length of Unit	1 day
Objective	Students will learn about symmetry and invisible numbers from the TED video and be able to complete a worksheet on the content.
Materials Needed	<ul style="list-style-type: none"><li>• Access to computers where students can view the video</li><li>• Pencil and paper for students</li><li>• Worksheet on Symmetry</li></ul>
Standards	G.7.4 and G.7.6
Procedure	<p>Allow the students to watch the TED video listed above either on their own or as an entire class. After they have watched the entire video, open it up for class discussion. The students can discuss questions about the content or simply discuss what they learned or how the information confirmed what they already knew. When you feel confident that the student understood the video, complete your lesson on symmetry and make sure the students are ready to complete the worksheet.</p> <p>If you want the students to do more with the video, you can have them write a short analysis giving their opinion and a summary of the video.</p>

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First, there is a TED blog entry related to math (<http://blog.ted.com/math/>). The students can watch a variety of videos about math problems. For an example, Oxford mathematician Marcus du Sautoy offers a glimpse of the invisible numbers that related to all symmetrical objects. The students can download these TEDTalks, rate and comment on them. Such talks introduce the beauty of pi, and the history of Mathematics. These topics can enhance the student's interest in mathematics. Students can also solve some math problems according to these talks.

Then, the students can search some TEDTalks about math through TED tags (<http://www.ted.com/talks/tags/id/52>). After watching the videos, teachers can require the students to comment their own opinions about these ideas. This will benefit the students to understand more deeply about math. The students can create a short video about a specific math problem by themselves while sharing their ideas with others and

checking others view points.

In addition, the teachers who are teaching in Secondary Math can learn some new ideas about math and introduce them to their students. The videos can be good examples to show in their math classes. At the same time, the teachers can improve their teaching methods after watching the speakers' good presentations.