

Angry Birds Lesson Plan  
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1. Standards:
  - A1.2.8 Solve an equation involving several variables (with numerical or letter coefficients) for a designated variable. Justify steps in the solution.
  
  - A3.3.3 Convert quadratic functions from standard to vertex form by completing the square.
  
2. Behavioral Objective:

Given a table or situation, the learner will be able to write a quadratic function in standard form with 100% accuracy.
  
3. Anticipatory Set:

As students walk into the classroom the teacher is playing angry birds and is projected so all students can watch. After a few minutes of playing the game, ask the students to write down how they think the game is relevant to quadratic functions.
  
4. Objective/Purpose:

“So we are going to learn how to write a quadratic function into standard form when you are given a table or situation. First, we will practice with a step-by-step explanation and then we will practice what we learned by ourselves. Writing quadratic functions into standard form is a great way to exercise our brains in a problem solving way! Now lets have some fun doing math!!! ”
  
5. Input:
  - A. Task Analysis
    - i. Start with the anticipatory set.
    - ii. State the purpose for the lesson.
    - iii. As a class, watch teacher and take notes on the explanation on the examples provided.
    - iv. Each student will turn to their partner and summarize the steps they saw the teacher provide. This would also be a good time for students to ask any questions they may have. As the teacher, make sure you hear the students saying the steps correctly.
    - v. Next we will split the class into groups of 3 or 4 and each group will use the formative assessment circular check,

while the teacher is walking around and overseeing the groups and asking any questions that might arise.

vi. Come together as a class and give each student one problem to do on their own.

vii. The students will then do Am I a “10”? and give it to the teacher as an exit pass.

#### B. Thinking Levels

1. Comprehension – Understand the step of writing a quadratic function into standard form.

2. Application – Applying the steps of writing a quadratic function into standard form.

3. Analysis – Break down other students steps and make sure their group is correctly answering the questions and doing the steps.

4. Evaluation – Judge their selves on a 1 to 10 scale for their exit pass with the Am I a “10”?.

#### C. Learning Styles

1. Visual: Students will see the steps.

2. Collaborative: Students work together during circular check.

#### D. Methods and Materials:

1. Following a step-by-step explanation.

2. Computer, projector, problems, paper, pencils.

#### 6. Checking for Understanding/ Guided Practice:

a) Modeled first

b) Summarize steps

c) Circular Check

d) Am I a “10”? exit pass

e) While watching students practice, observe their progress and answer any questions they may have.

#### 7. Closure:

a) For an exit pass have students use the formative assessment Am I a “10”?.

b) If students want extra practice provide more examples and have student do them for homework.

c) If any students are not satisfied with their performance, have them come see you one-on-one during lunch or before/after school and find a different way to explain the material.

