

## Break Out Box- Space Lesson Plan

### **Context** (InTASC 1,2,3)

**Lesson Plan Created By:** Ashley Peterson

**Created:**

**Lesson Topic:** Space Theme Break Out Box

**Grade Level:** Small Groups Grades 2-4

**Duration:** 45 minutes

### **Desired Results** (InTASC 4)

**Purpose:** The purpose of this lesson is to help build students critical thinking skills as they work together to solve problems. This is also a team building activity.

#### **North Dakota English Language Arts & Literacy Content Standards:**

- Speaking and Listening Standards: Presentation of Knowledge and Ideas
  - SL.1 (Grade 4) Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners.
  - L.2 (Grade 2) Demonstrate the command of conventions of Standard English grammar and usage when writing or speaking. (focus is on plural nouns)

#### **North Dakota Science Content Standards:**

- Science Standards: Students understand the basic concepts and principles of earth and space science.
  - 5.5 (Grade 5) Identify components of our Solar System (e.g. Planets, sun, and moon)

#### **Objectives:**

1. Students will work collaboratively to solve problems
2. Students will read information about the planets
3. Students will use clues to help them unlock various boxes

### **Assessment Evidence** (InTASC 6)

**Evidence of meeting desired results:** Students will accurately solve all problems to open the locked boxes as well as explain how they reached their answers.

### **Learning Plan** (InTASC 4,5,7,8)

#### **Instructional Strategy: (Check all that apply)**

Direct  Indirect  Independent  Experiential  Interactive

#### **Technology Use(s): (Check all that apply)**

Student Interaction  Align Goals  Differentiate Instruction  Enhance Lesson

Collect Data  N/A

#### **Hook and Hold:**

- Have the Breakout Box out for the students to see. Draw attention to it, and explain to the students that they will need to be detective today. There are a series of clues and boxes to unlock around the room. Once they reach the last box, the Breakout Box, they will find something special inside! They will have 45 minute to break out!

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Once they read the first clue the timer will start.

**Materials:**

- Breakout Box
- Black Three Digit Lock Box
- Extra box or envelope
- Directional Lock
- Word Lock
- Prize for inside the box
- Three pictures (Venus, Jupiter, Neptune)
- Directional Story
- Facts about the Planets!
- Hint Cards (optional)
- Timer on Active Board (optional, can use a regular timer)

**Procedures:**

You will want to have everything out with the locks set before the students do this activity.

1. Place the Breakout Box somewhere in the room where the students can see it, you may want to draw attention to it as the end result is unlocking that box. The Breakout box will have the word lock on it. Change the word lock so the word “MOONS” is the combination.
  - a. Place something special inside the box as their ‘treat’ for breaking out. Some examples might include: no homework, extra recess, free time, a small piece of candy or any other type of fun prize.
2. Somewhere in the room, maybe on the white board in front of the class where everyone can see it tape the three pictures with information about the planets. (Venus, Jupiter, Neptune)
3. Place the black 3 digit lock box somewhere else in the room and set the three digit lock box to 258. Inside place the directional lock story.
4. Set the directional lock as follows: RIGHT,LEFT,UP,DOWN,RIGHT. Place the *Facts about Planets* information inside an extra box or envelope and place the directional lock on it. (an extra box works best to lock but if you use an envelope you can just place the directional lock on top of it and let the students know they need to unlock that lock before they can open the envelope)
5. You can also write the word ‘Hint’ on the board or create a hint card for the students to use if they get stumped on a problem. Try to limit them to only one or two hints as the point is to get them thinking and problem solving.

<https://www.youtube.com/watch?v=rH9WbLYOgB0>

Follow the above link to the Breakout Box timer. Have the timer up on the active board for all students to see.

**Breakout Box in action**

1. Explain the process to the students if they have never done a Breakout Box before.
2. Their first clue is somewhere around the room. You will need to find that clue and the first box you will open will be the black box.
3. After opening each box you will get a new clue leading you to a new box to unlock. Once you begin I will start the timer.

Students will unlock the three digit lock box using the pictures on the board. Inside they will find the directional lock story. They will need to read the story and use the ‘directional words’ within it to

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unlock the directional lock box. Inside that box they will find the 'Facts about the planets!' page. They should notice that some of the letters are red. If they write each red letter down it will reveal another clue reading 'plural form of moon'. The plural form of moon which is MOONS will unlock the final Breakout box.

1.

**Summary:** At the end of the lesson bring students together and discuss how they found their answers. Students will understand that the concepts learned throughout this activity will be used in lessons about the planets to come.

**Reflection** (InTASC 9)**Reflect On:**

- *Preparation*
- *Planning*
- *Teaching*
- *Student Engagement and Participation*
- *Evidence of Student Learning*

**Standards**

Council of Chief School Officers. (2011, April) *Interstate Teacher Assessment and Support Consortium (InTASC) model core teaching standards: a resource for state dialogue*. Washington DC. Retrieved from [http://www.ccsso.org/documents/2011/intasc\\_model\\_core\\_teaching\\_standards\\_2011.pdf](http://www.ccsso.org/documents/2011/intasc_model_core_teaching_standards_2011.pdf)

North Dakota Department of Public Instruction. (2011) *North Dakota English language arts & literacy content standards*. Bismarck, ND. Retrieved from [https://www.nd.gov/dpi/uploads/87/ELA\\_JUN0811.pdf](https://www.nd.gov/dpi/uploads/87/ELA_JUN0811.pdf)

North Dakota Department of Public Instruction. (2011) *North Dakota Science content standards*. Bismarck, ND. Retrieved from <https://www.nd.gov/dpi/uploads/87/science.pdf>

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