

Bachelor of Education (Elementary) & Bachelor of Education (Secondary) STEM/BETT Lesson Plan

Lesson Title: Introduction to Plate Tectonics Lesson # 1 Date: 3/5/ 2026
 Name: Rita (Shiyu) Ma Subject: Science Grade(s): 8

Rationale:

Teacher introduction and classroom expectations: Introducing myself to the students is important for them to understand my position as a teacher, and who I am as a person. Understanding classroom expectations is important for students to help facilitate a constructive and positive learning environment.

Understanding the continental drift hypothesis, what it explains as well as why it was rejected, is important for students to understand as it introduces students conceptualizing how the Earth continues to change shift. This initial understanding can then be built upon in future lessons for a better understanding of plates and plate tectonics.

Core Competencies:

Communication	Thinking	Personal & Social
Collaborating: Students will be working together with their peers and to complete the puzzle (if they so choose to) to effectively accomplish the tasks. They will work to speak to each other and collaborate respectfully to facilitate positive group interactions.	Critical Thinking: Students will analyze the puzzles they have been given to look for patterns. They will be synthesizing this information as a class to design a theory as to why these patterns exist (as a segway into the continental drift hypothesis).	Personal Awareness and Responsibility: Students will be encouraged to make constructive decisions and act on them while collaborating with their peers.

Big Ideas (Understand)

The theory of plate tectonics is the unifying theory that explains Earth's geological processes.

Learning Standards

(DO)	(KNOW)
Learning Standards - Curricular Competencies	Learning Standards - Content
- Questioning and predicting: Make observations aimed at identifying questions. - Processing and analyzing data and information: Seek patterns and connections in data from their own investigations and secondary sources.	Plate tectonic movement (continental drift hypothesis)

Instructional Objectives & Assessment

Instructional Objectives (students will be able to...)	Assessment
TSWBAT define the continental drift hypothesis.	Observation, diagnostic – I will be looking to see how students respond to my class expectations, and how I will need to adjust them moving forward. I will also be looking to observe which students may need additional support.

Prerequisite Concepts and Skills:

- Prior knowledge of the locations and shapes of major continents and oceans.
- Science 7 Big Idea: Earth and its climate have changed over geological time.

Indigenous Connections/ First Peoples Principles of Learning:

- Learning is experiential and relational – students will experience making their own observations as they work to identify the relationships in the puzzle to solve for Pangea.

Universal Design for Learning (UDL):

- The lesson's agenda/outline will be written on the board for students who need time to process information regarding upcoming activities and expectations.
- Multiple Means of Delivery: Instructions are provided visually (written on the worksheets) and verbally (during introduction).

Differentiate Instruction (DI):

- No specific designations have been communicated, only behavioural management concerns.
- Students may work in pairs to complete the Get to Know You bingo (buddy/peer support).

Materials and Resources

- PowerPoint slide deck
- Laptop (with internet connection) and adaptor
- Projector
- Get to Know You Bingo worksheets (1 per student).
- Plate tectonics puzzle activity materials:
 - Worksheet (20 copies per class).
 - Scissors.
 - Glue sticks.

Lesson Activities:

Teacher Activities	Student Activities	Time
Introduction (anticipatory set – "HOOK"): Hook: - Attendance question: Do you think there are volcanoes in BC? - The "Growing Map" Riddle: Project a map of the world. Ask students: "If you look at the Atlantic Ocean, do the coastlines of South America and Africa look like they belong together?" Show a quick animation of the continents drifting apart to spark curiosity. Introduction to the Unit: • I will circle back to the attendance question and provide an overview of the Earth Science unit content.	Introduction (anticipatory set – "HOOK"): Hook: • Students may choose to answer or pass on the attendance question. Introduction to the Unit: • Students will be asked to listen respectfully, and engage with any questions asked.	5 min 15 min
Body:	Body:	

- Teacher use the PPT and go through the handout, and give student time to finish their notes Activity: • I will introduce the Plate Tectonics Puzzle (source). • I will instruct students to do their best to put together the puzzle, and note down observations on why they connected pieces in certain ways. • I will circulate the classroom during this time and ask students questions about what they noticed. Class Discussion: • I will tie the activity back to the content by asking students to share their observations, leading into a discussion on Pangea and the continental drift hypothesis. • Using the PowerPoint slide deck, I will lead a discussion what the continental drift hypothesis tells us, and why it was initially rejected.	- Student take notes and ask question if they need. Activity: • Students will be given a Plate Tectonics Puzzle (source). • Students may choose to work independently or in pairs to complete the puzzle and note their observations. Class Discussion: • Students will be asked to share their observations. • Students will be asked to listen respectfully, and engage with any questions asked.	20 min 20 min
Closure: Clean-up: • I will communicate to the students where to put back any materials.	Closure: Clean-up: • Students will put away any materials used, including any items lent out by the teacher.	5 min

Organizational Strategies:

- Written instructions will be provided (written on the whiteboard or on the slide deck) to minimize the amount of questions that may arise;
- Have a central area where all materials can be accessed and returned; and
- Communicate how work should be handed in ahead of time to minimize confusion.

Proactive, Positive Classroom Learning Environment Strategies:

- Establish clear expectations for the activity and discussion within the lesson.
- Acknowledge and positively reinforce positive and/or productive behaviour exhibited by students.
- Model appropriate behaviour (e.g., when a student is speaking, the teacher's full attention should be on that student).

Extensions:

- Students can read textbook pages 272 to 276.
- Students can complete workbook pages 145 to 147.

Reflections (if necessary, continue on separate sheet):

If required, can be completed after lesson completion.