



## 5E Model for Integrated STEM Lesson

Lesson Title: Let's Do Lunch

Estimated Time: 2-45 minutes lessons  
Unit Title: Farms Around the World

Grade Level: 3

### Content Standards:

~**3.WCI.b** Students will analyze and interpret weather data to identify day-to-day variations as well as long term patterns.

~**3.WCI.c** Students will obtain information about different climatic areas to predict typical weather conditions expected in a given area.

~**3.WCI.d** Students will obtain and evaluate information about a variety of weather-related hazards that result as the natural processes, as well as their environmental and societal impacts.

~**3.WCI.e** Students will collaboratively design, compare, and refine solutions that reduce environmental or societal impacts of a weather-related hazard.

~**3.EIO.a** Students will obtain, evaluate and communicate information about the types of habitats in which organisms survive live, and ask questions based on that information.

~**3.EIO.b** Students will obtain, evaluate, and communicate information that in a particular environment, some kinds of organisms survive, some survive less well, and some can not survive at all.

~**3.EIO.c** Students will analyze data to describe how humans, like all organisms, obtain living and non- living resources from their environment.

~**3.EIO.d** Students will use models to evaluate how environmental changes affect the number and types of organisms that live there; some remain, move in, move out, and/or die.

~**3.EIO.e** Students will use evidence to argue that some changes in an organism's habitat can be beneficial or harmful to the organism.

~**3.EIO.f** Students will obtain and communicate information about the characteristics of groups of organisms and evaluate how groups help organisms survive.

### Vocabulary

- climate
- cultivate
- harvest
- erosion
- drought
- weather
- floods
- tsunamis
- hurricanes
- tornados
- region (tropical, temperate, and polar)

## Materials

- [World map](#) that includes climate and topography, biome cards, food cards, concept map, book, [A World of Farming:- Farms Around the World](#), rice.

## CCSS Application and other content connections

Math ~ 3.0 Knowledge of Measurement- students will identify attributes, units and systems of measurements and apply a variety of techniques, formulas, tools, or technology for determining measure met.

Art ~ Students can design a lunchbox from their own creativity

L.A. ~RI 13 Describe the relationship between a series of historical events, scientific idea or concepts, or steps in technical

~RI7 Use information gained from illustrations (e.g., maps, photographs) and the key words in the text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur)

~W1 CCR Anchor Standard Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence

~W2 CCR Anchor Standard Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

~W3 CCR Anchor Standard Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences

~W4 CCR Anchor Standard Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

~W5 CCR Anchor Standard Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.

~W6 CCR Anchor Standard Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others

S.S. – 300.30.01.a.1 Using Geographic tools to describe the characteristics and purpose of a globe, an atlas, and a variety of maps, such as community, transportation, physical, and political

~SS.300.30.02 Geographic Characteristics of Places and Regions to describe how natural/physical features affect the ways the people, live, and work, and the population distribution of a region.

~SS.300.30.01 Scarcity and Economic Decision-Making

## DAY 1

STEM Standards of Practiceper

**Engagement:** The teacher will engage the students by asking them about various regions of the world and where they are located on a map. The teacher and students will define the word “climate.” The teacher will pose the question, “Does the climate affect the types of plants that grow in a particular geographic region?” The teacher will record the students ideas on the board or overhead projector.

**Exploration:** The students will listen to the teacher read aloud the book, [A World of Farming: Farms Around the World](#). The teacher will pause to point out the weather and climate of the region found in the book. Students will then determine the climate of a region by completing a climate map, using a world map. The students will locate various regions on their map, using a grain of rice to mark the farms around the world.. The students will discuss and share information using a concept map listing ideas for “Why is Rain Important?”

**Explanation:** Students should be able to use the concept map to explain that the plants and animals depend on the climate and weather for survival, just as people depend on the food that nature provides within a given region. Students will then match their food card to the particular region in which it would be found, based on the climate of the region.

[Concept Map](#)

**Extension:** Students will then discuss the possibility of a flood, tsunami, hurricane, tornado, or drought and the effect that it could have on the food that is produced in a particular region. Students can make a climate book listing the three major climates: tropical, temperate, and polar.

[Writing Prompt](#)

**Additional Resources:** [On the Same Day in March: A Tour of the World's Weather](#),  
[Bringing the Rain to the Kapiti Plain](#), [From Cow to Milk Carton](#), [From Grain to Pita](#), [Saturday Sancocho](#),

**Evaluation/Formative Assessment:** Students can then play a learning game with a friend by matching the region to a particular food that is found there. Students will also need to be able to complete an exit slip explaining the importance of rain in a particular region of the world and how that can affect a particular food source found there.