Lesson Plan Model

Lesson Title/#: Monthly Temperature

Grade Level: 2nd Grade Math/Science

Learning Central Focus

Central Focus What is the central focus for the content in the learning segment?	The central focus of this lesson is to allow students to learn about temperature and how to read a thermometer using different scales.
Content Standard What standard(s) are most relevant to the learning goals?	**2.MD.D.10** Draw a picture graph and a bar graph, with single-unit scale, to represent a data set with up to four categories. Solve simple put-together and take-apart problems and compare problems using information presented in a bar graph. **2-ETS1-3** Analyze data from tests of an object or tool to determine if it works as intended.
Student Learning Goal(s)/ Objective(s) **Skills/procedures** What are the specific learning goal(s) for student in this lesson? **Concepts and reasoning/problem solving/thinking/strategies**[1] What are the specific learning goal(s) for students in this lesson?	Students will learn about the different scales used to measure temperature using a thermometer. Students will be able to visually see the change in temperature of the course of three months. Students will learn how to use and read a thermometer using different scales. Students will record the daily temperature in a table to use at the end of each week and month. Students will be introduced to finding the average temperature over specific time periods and be able to apply the data into a bar graph.
Prior Academic Knowledge and Conceptions What knowledge, skills, and concepts must students already know to be successful with this lesson?	Students should already understand what months are included in each season. Students should, also, know that the fall months bring cold winters which is why the temperature declines during those months. Students should be able to read objects that have numbers already on them such as a thermometer! By having the students understand these simple concepts previously to this lesson can make them be successful!

[1] *The prompt provided here should be modified to reflect subject specific aspects of learning. Language here is mathematics related. See candidate edTPA handbooks for the "Making Good Choices" resource for subject specific components.*

What prior knowledge and/or gaps in knowledge do **these** students have that are necessary to support the learning of the skills and concepts for this lesson?	Students should know that the temperature declines during the months of September to November to prepare for the cold winter season approaching. Students should be able to enter data (numbers) into a table that is already prepared for them. By having students understand why temperature increases and decreases based on the time of the year, will allow them to learn additional skills and concepts integrated into this lesson!
Common Errors, Developmental Approximations, Misconceptions, Partial Understandings, or Misunderstandings What are common errors or misunderstandings of students related to the central focus of this lesson? How will you address them for **this group** of students?	

Instructional Strategies and Learning Tasks

Description of what the teacher (you) will be doing and/or what the students will be doing.

Launch 2 minutes every day How will you start the lesson to engage and motivate students in learning?	Since all the students will be in a group at the carpet for morning time already, it is important to engage the students in some way to get them excited for one of their classmates to read the thermometer! The instructor could always ask which student read the thermometer the day before or for a classmate to check the thermometer reading schedule to let the class know which classmate gets the opportunity to read the thermometer today!
Instruction 3 minutes every day What will you do to engage students in	

developing understanding of the lesson objective(s)?	To keep the students engaged in developing understanding while a classmate is checking the weather outside and reading the classroom thermometer, I can play "The Thermometer Song" on the SmartBoard. As a class, they can sing along and dance around during this time.
How will you link the new content (skills and concepts) to students' prior academic learning and their personal/cultural and community assets?	To connect the students with the new temperature readings each day, I can allow them to go to their desks to get out their "Temperature Charts". The instructor can then ask the class to tell him/her what the temperature was yesterday to allow the students to interpret their temperature table or what they might predict what the temperature might be for the next day.
What will you say and do? What questions will you ask?	The instructor might ask the class basic questions that allows the students to study and read their temperature tables. Some questions to consider asking the students might be… - "Can someone tell me what the temperature was yesterday?" - "By reading your tables, could someone tell me what the temperature was this time last week?" - "Could someone tell me the difference in temperature from this time last week and today's temperature?"
How will you engage students to help them understand the concepts?	The instructor might engage students in understanding the new concepts by constantly asking them questions that a student can answer one at a time, and not as a whole class. For example, if the instructor directly asked a student one of the questions listed above, the instructor would be able to assess the student in their understanding of how to read the temperature table.
What will students do?	At this time, students should wait to be called on or raise their hands if wanting to answer a question that the instructor might ask the class or a student to answer. The students should not be loud and shouting out the answers.
How will you determine if students are meeting the intended learning objectives?	As an instructor, it is important to know if students are meeting the intended learning objectives. After each week, the instructor might collect the temperature tables that belong to each student to visually see which students are correctly doing what they are supposed to or which students failed to write down a temperature for a particular day. The instructor might, also, give a written assessment every other week and allow each student to

	record their temperatures for every week. The instructor would then be able to compare the temperatures allowing the instructor to see which students were and/or were not paying attention on a specific day.
Structured Practice and Application 5 minutes every day How will you give students the opportunity to practice so you can provide feedback? How will students apply what they have learned? How will you determine if students are meeting the intended learning objectives?	To allow students the opportunity to practice for the instructors to provide feedback, students will be able to ask questions or make comments throughout this time whenever by simply raising their hands! I, as the instructor, might ask the basic questions directed to the whole class to see interpretation levels within the classroom. Students will apply what they are have learned each day by recording the daily temperatures in a table by creating bar graphs at the end of each month. Each of the bar graphs made will show the daily temperatures over the course of each month. When the graph is completed, students will be able to visually see how often the weather changes in a month! As an instructor, I will be able to determine if students are meeting the intended learning objectives by checking up with each students' progress in regards to their temperature tables at the end of each week as well as each month. I will, also, see if students have met the intended objectives by waiting and seeing their completed bar graphs at the end of each month!
Closure 1 minute every day How will you end the lesson?	I, as the instructor, will end the lesson each day by having the students turn to a nearby classmate to tell one another one thing they learned today as well as what they predict what they think tomorrow's temperature might be!
Differentiation/ Planned Support How will you provide students access to learning based on	*Whole Class*: *Groups of students with similar needs*:

individual and group needs? How will you support students with gaps in the prior knowledge that is necessary to be successful in this lesson?	*Individual students*: *Students with IEP's or 504 plans*: *Strategies for responding to common errors and misunderstandings, developmental approximations, misconceptions, partial understandings, and/or misunderstandings*:
Student Interactions How will you structure opportunities for students to work with partners or in groups? What criteria will you use when forming groups?	To allow students to work with partners or in groups, I might allow the students to compare their temperature tables or bar graphs at the end of each month. I might, also, allow students to only do this on days where good behavior is visible throughout the ENTIRE class! When allowing students to form groups or find a partner, I may let them work with their best friend in the class, the classmate sitting to the right of them, or I might randomly pair students up in twos or threes. By doing this, allows there to be a change in groups and to keep students interacting with ALL their classmates and not the same friends every time.
What Ifs What might not go as planned and how can you be ready to make adjustment?	Students might show poor or unwanted behavior towards this activity. By planning students to check the classroom thermometer previously to starting the activity, might allow students to know that they will each get to be that "special thermometer reader"! Students might struggle with keeping up with their temperature tables, making the instructor to collect them for each student every day.

Theoretical Principles and/or Research–Based Best Practices Why are the learning tasks for this lesson appropriate for your students?	
Materials What materials does the teacher need for **this lesson?** What materials do the students need for **this lesson?**	SmartBoard, access to YouTube, example chart, blank template chart, pencil and/or pen, thermometer Pencil, blank template chart

Academic Language Demand(s):

What language function do you want students to develop in this lesson? What must students understand in order to be intellectually engaged in the lesson?	
What content specific terms (vocabulary) do students need to support learning of the learning objective for this lesson	
What specific way(s) will students need to use language (reading, writing, listening and/or speaking) to participate in learning tasks and demonstrate their learning for this lesson?	

What are your students' abilities with regard to the oral and written language associated with this lesson?	
How will you **support** students so they can understand and use the language associated with the language function and other demands in meeting the learning objectives of the lesson?	

Assessments:

*Describe the tools/procedures that will be used in **this lesson** to monitor students' learning of the lesson objective(s). Attach a copy of the assessment and the evaluation criteria/rubric in the resources section at the end of the lesson plan.*

Type of assessment (Informal or Formal)	Description of assessment	Modifications to the assessment so that all students could demonstrate their learning.	Evaluation Criteria - What evidence of student learning (related to the learning objectives and central focus) does the assessment provide?

Analyzing Teaching

To be completed after the lesson has be taught

What worked? What didn't? For whom?	
Adjustments What instructional changes do you need to make as you prepare for the lesson tomorrow?	
Proposed Changes. If you could teach this lesson again to this group of students what changes would you make to your **instruction**?	*Whole class*: *Groups of students*: *Individual students*:
Justification Why will these changes improve student learning? What research/ theory supports these changes?	

Resources:

Attach each assessment and associated evaluation criteria/rubric.