

Lesson Plan #3 Title: Building Pictographs

Performance Objective: Given an online video presentations of bar graphs and pictographs the students will complete an online quiz with 5 out of 7 questions for mastery. The students will use stickers to create a pictograph of data given on a worksheet with 3 out of 4 columns correctly representing the given data.

Resources or Materials Needed:

❖ Teacher

- Projector
- Desktop Computer
- Access to Khan Academy Website
- Access to Khan Academy making picture graphs video
- <https://www.khanacademy.org/math/cc-2nd-grade-math/cc-2nd-measurement-data/modal/v/making-line-plots>

❖ Students

- Desktop Computer
- Pencils
- Stickers with pictures of bugs on them
- Pictograph assessment

Time: Approximately 90 minutes

Step 1: Pre-Instructional Activities: (students are seated at their desks)

- Teacher will review the purpose of graphs is to gather information and represent data.
- Teacher will show examples of bar graphs.
- Teacher will review the components of graphs (title, key, labels)
- Teacher will review pictograph of class graph of *Our Favorite Apples* from Lesson #3.

Step 2: Content Presentation:

- ❖ Explain to students that they will be watching a video on building pictographs.
 - <https://www.khanacademy.org/math/cc-2nd-grade-math/cc-2nd-measurement-data/modal/v/making-line-plots>
- ❖ Inform the students that they will be practicing building pictographs on the computer.

Step 3: Learner Participation:

- ❖ Students will access www.khanacademy.com
- ❖ Instruct students to access the following:
 - **Learners**
 - **Math**
 - **2nd Grade**
 - **Measurement, data, geometry**
 - **Picture graphs**
 - **Making Picture Graphs 1**

- <https://www.khanacademy.org/math/cc-2nd-grade-math/cc-2nd-measurement-data/modal/e/make-picture-graphs-1>

Step 4: Assessment (Appendix D)

- ❖ After students complete online building pictographs instruct them to return to their seats.
- ❖ Distribute assessment worksheet of building a pictograph.
- ❖ Distribute a sheet of stickers with pictures of bugs on them.
- ❖ Instruct students to use the stickers to represent the data given on the assessment.
- ❖ Students will use the bug stickers to represent the given data on the assessment.
- ❖ Teacher will monitor.

Step 5: Follow-Through Activities:

- ❖ **Math Center:**
 - **Supplies:**
 - Stickers with different pictures (flowers, insects, bugs, etc.)
 - task cards
 - **Center Activity:**
 - The students will build pictographs using stickers to construct a pictograph that corresponds to the task card.
 - After building the pictograph the students will complete a bar graph worksheet that represents the data from the pictograph.
 - Students will continue to practice graphing at home with their ixl.com accounts

Lesson Plan Summary: The instructional strategy used in the learner participation of building a pictograph representing the data aligns with the cognitivism theory. The students demonstrate their learning of pictographs by building pictographs digitally and by modeling pictographs on the paper assessment with the stickers representing the data.