

|  |  |  |
| --- | --- | --- |
| Digging into Seashells | | Domain_Science_Icon |
|  | **intent:**  Engage participants with the process of scientific inquiry through observation, investigation, documentation, and communication. | |
|  | **OUTCOMES:**  Participants build community with each other as they increase their understanding of the scientific inquiry process (observation, investigation, documentation, and communication) while reflecting on other domains addressed in STEAM. | |
|  | **Materials Required:**   * PPT slide * Trainer notes * Handout 10: Digging into Seashells * Handout 8: Open-Ended Questions and Science Materials * Materials for each table: Tray with sand and seashells, paper, crayons, pencils, markers, chart paper, scientific tools in a paper bag     **TIME**: 20 minutes | |
| MPj04384510000[1] | **Process:**   * Prior to training: Lay out all the table materials—except for the scientific tools—at each table; the scientific tools will be brought out later during the activity. * Explain that we are going to explore the components of scientific inquiry—observation, investigation, documentation, and communication—through the hands-on exploration of seashells. (Refer to slide appropriate PPT slide.) * Invite participants to take out Handout 10: Digging into Seashells; they will be working to complete this handout throughout the activity. * Guide participants through the following steps using Handout 10: Digging into Seashells: * Ask participants to complete the first question: What do I know about seashells? Identify vocabulary words that are integral to exploring seashells. * Have participants to observe, investigate, compare, and classify the seashells. Explain that they can pick up and explore the size, shape, and feel of the shells. Ask them to identify what questions they might ask students as they observe and investigate the seashells. Refer participants to Handout 8: Open-Ended Questions and Science Materials. * Ask participants to complete the second question: What new things did I discover about seashells? (Place scientific tool bags on the tables as participants are working.) * Have participants open their scientific tool bags and to continue observing and investigating. * Ask participants to complete the third question: How did the scientific tools expand the scientific inquiry process and deepen your exploration of seashells? * Invite participants to document their discoveries by drawing on paper. * Have participants discuss their observations and reflections with their tablemates. * Ask groups to chart their top three scientific inquiry insights; have them include a pictorial representation of their learning on the chart paper. * Have participants display their charts and share their learning. (Idea for display: ocean scene: child playing by the sea, seashell, bucket, shovel, and sand.) | |
|  | **Debrief**:   * What was interesting to you about the conversations you had? * Was there something you found surprising? * How might you use what you felt in this activity in the classroom? * What is one new idea regarding science that you can add to your classroom that utilizes your strengths as a teacher? | |