

## G3 Lessons at a Glance: Daily Supplies List

Note: any additional supporting documents (including model anchor charts and any printable or downloadable files) referenced in a lesson can be found in the “Supporting Files” section for that day’s lesson.

LESSON	MINI-LESSON	INQUIRY CIRCLES	SCIENCE INVESTIGATION
<b>Day 1:</b> <b>Why Do Scientists Work in Teams?</b>	<b>Teacher needs:</b> <ul style="list-style-type: none"> <li>• chart paper</li> <li>• marker(s)</li> <li>• “Team Roles” anchor chart</li> <li>• “Inquiry Toolbox” anchor chart</li> </ul>	<b>Each team needs:</b> <ul style="list-style-type: none"> <li>• list of North American ecosystems</li> <li>• exploratory texts (see the “Ecosystem Resources” spreadsheet for ideas)</li> </ul> <b>Teacher needs:</b> <ul style="list-style-type: none"> <li>• list of North American ecosystems for research (aquatic polar, desert, tundra, ocean, temperate forest, or grassland)</li> <li>• “Ecosystem Resources” spreadsheet</li> </ul>	<b>Each team needs:</b> <ul style="list-style-type: none"> <li>• air-dry clay to create model</li> <li>• access to the shoebox with diatom model inside</li> </ul> <b>Teacher needs:</b> <ul style="list-style-type: none"> <li>• prepared shoebox with diatom model inside</li> <li>• An object with 3 dimensions to model with</li> </ul> <b>Setup:</b> see Day 1 lesson plan
<b>Day 2:</b> <b>What’s the Green Stuff in the Jar?</b>	<b>Teacher needs:</b> <ul style="list-style-type: none"> <li>• chart paper</li> <li>• marker(s)</li> <li>• class Inquiry Chart (pond ecosystem)</li> <li>• exploratory text about pond ecosystems to model the strategy</li> </ul> <b>Setup:</b> see Day 2 lesson plan	<b>Each team needs:</b> <ul style="list-style-type: none"> <li>• pencils</li> <li>• team Inquiry Chart (<b>created on chart paper by the teacher</b>)</li> <li>• informational texts (see the “Ecosystem Resources” spreadsheet for ideas)</li> </ul> <b>Teacher needs:</b> <ul style="list-style-type: none"> <li>• marker(s)</li> <li>• class Inquiry Chart (pond ecosystem)</li> </ul> <b>Setup:</b> see Day 2 lesson plan	<b>Each team member needs:</b> <ul style="list-style-type: none"> <li>• science notebook</li> <li>• pencil</li> </ul> <b>Each team needs:</b> <ul style="list-style-type: none"> <li>• access to the 1L bottle of the “green substance”</li> <li>• hand lenses and/or loupes</li> <li>• 1 ziplock bag containing the “Green Substance” images</li> </ul> <b>Teacher needs:</b> <ul style="list-style-type: none"> <li>• marker(s)</li> <li>• 1 Liter bottle of the green substance</li> <li>• “Green Substance” images</li> <li>• large ziplock gage</li> <li>• the chart paper labeled “<b>Questions We Have about Ecosystems</b>”</li> </ul> <b>Setup:</b> see Day 2 lesson plan

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<p><b>Day 3:</b> <b>What Do We Know about the Green Substance?</b></p>	<p><b>Teacher needs:</b></p> <ul style="list-style-type: none"> <li>• chart paper</li> <li>• marker(s)</li> <li>• “Monitoring Comprehension” anchor chart as a model</li> <li>• two preselected short passages from an exploratory text about pond ecosystems</li> </ul>	<p><b>Each team needs:</b></p> <ul style="list-style-type: none"> <li>• team Inquiry Chart</li> <li>• pencils</li> <li>• exploratory texts/media (see the “Ecosystem Resources” spreadsheet for ideas)</li> </ul> <p><b>Teacher needs:</b></p> <ul style="list-style-type: none"> <li>• class Inquiry Chart (pond ecosystem)</li> </ul>	<p><b>Each team member needs:</b></p> <ul style="list-style-type: none"> <li>• one Organism card</li> <li>• science notebook</li> <li>• pencil</li> </ul> <p><b>Teacher needs:</b></p> <ul style="list-style-type: none"> <li>• chart paper</li> <li>• marker(s)</li> <li>• one set of Organism Cards</li> <li>• 8½ x 11 “Needs of Living Things” placards</li> </ul> <p><b>Setup:</b> see Day 3 lesson plan</p>
<p><b>Day 4:</b> <b>What Makes a Good Science Question?</b></p>	<p><b>Teacher needs:</b></p> <ul style="list-style-type: none"> <li>• chart paper</li> <li>• marker(s)</li> <li>• “Fix-up Strategies” anchor chart as a model</li> <li>• exploratory text about pond ecosystems to model the strategy</li> </ul>	<p><b>Each team needs:</b></p> <ul style="list-style-type: none"> <li>• team Inquiry Chart</li> <li>• pencils</li> <li>• exploratory texts/media (see the “Ecosystem Resources” spreadsheet for ideas)</li> </ul> <p><b>Teacher needs:</b></p> <ul style="list-style-type: none"> <li>• class Inquiry Chart (pond ecosystem)</li> <li>• exploratory text, website, or eBook about pond ecosystems to model the strategy</li> </ul>	<p><b>Each team member needs:</b></p> <ul style="list-style-type: none"> <li>• science notebook</li> <li>• pencil</li> </ul> <p><b>Each team needs:</b></p> <ul style="list-style-type: none"> <li>• access to “Questions We Have about Ecosystems” chart</li> <li>• access to “What Makes a Good Science Question” anchor chart</li> <li>• 1 pre-assembled question wheel (“Is My Question Testable?”)</li> </ul> <p><b>Teacher needs:</b></p> <ul style="list-style-type: none"> <li>• marker(s)</li> <li>• chart paper with “Questions We Have about Ecosystem” (created in class on day 2)</li> <li>• chart paper with “Ideas and Questions about the Green Substance” (created in class on Day 3)</li> <li>• “What makes a Good Science Question” anchor chart</li> <li>• templates for the question wheel (“Is My Question Testable?”)</li> <li>• card stock</li> <li>• scissors</li> <li>• brad</li> <li>• tape</li> </ul> <p><b>Setup:</b> see Day 4 lesson plan</p>

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<p><b>Day 5:</b> <b>What Kind of Information Will I Collect?</b></p>	<p><b>Teacher needs:</b></p> <ul style="list-style-type: none"> <li>• chart paper</li> <li>• marker(s)</li> <li>• “Reading for Specific Information on a Website” anchor chart to model the strategy</li> <li>• class Inquiry Chart (pond ecosystem)</li> <li>• website about pond ecosystems</li> </ul>	<p><b>Each team needs:</b></p> <ul style="list-style-type: none"> <li>• team Inquiry Chart</li> <li>• pencils</li> <li>• exploratory texts/media (see the “Ecosystem Resources” spreadsheet for ideas)</li> </ul> <p><b>Teacher needs:</b></p> <ul style="list-style-type: none"> <li>• class Inquiry Chart (pond ecosystem)</li> <li>• exploratory text, website, or eBook about pond ecosystems to model the strategy</li> </ul>	<p><b>Each team member needs:</b></p> <ul style="list-style-type: none"> <li>• science notebook</li> <li>• pencil</li> <li>• 1 copy of “Data Log Example” sheet</li> </ul> <p><b>Each team needs</b></p> <ul style="list-style-type: none"> <li>• 1 copy of Team Data Log</li> <li>• 1 “Shades of Green” color chart</li> </ul> <p><b>Teacher needs:</b></p> <ul style="list-style-type: none"> <li>• 1 or 2 liter containers of the green substance</li> <li>• small plastic bottles (2 per team; see lesson)</li> <li>• 2 empty bottles to model with</li> <li>• measuring cup</li> <li>• funnel</li> <li>• “Shades of Green” color chart</li> <li>• “Data Log Example” sheet</li> <li>• Team Data Log</li> </ul> <p><b>Setup:</b> see Day 5 lesson plan</p>
<p><b>Day 6:</b> <b>Setting Up Learner Investigations</b></p>	<p><b>Teacher needs:</b></p> <ul style="list-style-type: none"> <li>• chart paper</li> <li>• marker(s)</li> <li>• class Inquiry Chart (pond ecosystem)</li> <li>• “Main Idea” anchor chart as a model</li> <li>• exploratory text about pond ecosystems to model the strategy</li> </ul>	<p><b>Each team needs:</b></p> <ul style="list-style-type: none"> <li>• team Inquiry Chart</li> <li>• pencils</li> <li>• exploratory texts/media (see the “Ecosystem Resources” spreadsheet for ideas)</li> </ul> <p><b>Teacher needs:</b></p> <ul style="list-style-type: none"> <li>• class Inquiry Chart (pond ecosystem)</li> <li>• exploratory text, website, or eBook about pond ecosystems to model the strategy</li> </ul>	<p><b>Each team member needs:</b></p> <ul style="list-style-type: none"> <li>• science notebook</li> <li>• pencil</li> </ul> <p><b>Each team needs:</b></p> <ul style="list-style-type: none"> <li>• 2 small bottles of the green substance (<b>prepared ahead of time by the teacher</b>)</li> <li>• Sharpie or black marker</li> <li>• a numbered team box or tray containing goggles and materials requested by the team, etc. (<b>prepared ahead of time by the teacher</b>)</li> <li>• “Safety Rules for the Investigation” sheet</li> <li>• Team Data Log</li> </ul> <p><b>Teacher needs:</b></p> <ul style="list-style-type: none"> <li>• paper funnels</li> <li>• 1 or 2 liters of the green substance</li> <li>• small plastic bottles (2 per team; see lesson)</li> <li>• markers</li> <li>• goggles</li> <li>• measuring or observation tools (hand lenses, measuring tape or rulers, etc.)</li> <li>• any materials requested by the teams for their investigation</li> <li>• “Safety Rules for the Investigation” sheet</li> </ul> <p><b>Setup:</b> see Day 6 lesson plan</p>

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Day 7: Why Do Certain Organisms Live in the Same Place?	Practice Day	<p><b>Each team needs:</b></p> <ul style="list-style-type: none"> <li>team Inquiry Chart</li> <li>pencils</li> <li>exploratory texts/media (see the “Ecosystem Resources” spreadsheet for ideas)</li> </ul> <p><b>Teacher needs:</b></p> <ul style="list-style-type: none"> <li>class Inquiry Chart (pond ecosystem)</li> <li>exploratory text, website, or eBook about pond ecosystems to model the strategy (optional)</li> </ul>	<p><b>Each team member needs:</b></p> <ul style="list-style-type: none"> <li>science notebook</li> <li>pencil</li> </ul> <p><b>Each team needs:</b></p> <ul style="list-style-type: none"> <li>1 set of Organism Cards</li> <li>“Ecosystem Headings” (distributed <b>after</b> the sorting)</li> </ul> <p><b>Teacher needs:</b></p> <ul style="list-style-type: none"> <li>Organism Cards</li> <li>Organism Cards answer key</li> <li>“Ecosystem Headings” sheet</li> <li>baggies or rubber bands for sets of cards</li> <li>“Safety Rules for the Investigation” sheet (posted or copied for learners)</li> <li>goggles</li> <li>gloves</li> </ul> <p><b>Setup:</b> see Day 7 lesson plan</p>
Day 8: Why Are Producers So Important?	<p><b>Teacher needs:</b></p> <ul style="list-style-type: none"> <li>chart paper</li> <li>marker(s)</li> <li>“Making Connections” anchor chart as a model</li> </ul>	<p><b>Each team needs:</b></p> <ul style="list-style-type: none"> <li>team Inquiry Chart</li> <li>pencils</li> <li>exploratory texts/media (see the “Ecosystem Resources” spreadsheet for ideas)</li> </ul> <p><b>Teacher needs:</b></p> <ul style="list-style-type: none"> <li>class Inquiry Chart</li> <li>exploratory text, website, or eBook about pond ecosystems to model the strategy (optional)</li> </ul>	<p><b>Each team member needs:</b></p> <ul style="list-style-type: none"> <li>science notebook</li> <li>pencil</li> </ul> <p><b>Each team needs:</b></p> <ul style="list-style-type: none"> <li>one set of 5 Organism Cards that make up a simple food chain (includes the Sun; <b>teacher will need to sort ahead of time</b>)</li> <li>3 food chain arrows</li> </ul> <p><b>Teacher needs:</b></p> <ul style="list-style-type: none"> <li>Organism Cards from Day 7</li> <li>“Food Chain Arrows” sheet</li> <li>“Food Chain answer key” PPT</li> <li>rubber bands or baggies</li> </ul> <p><b>Setup:</b> see Day 8 lesson plan</p>
Day 9: Who Are the Producers in Aquatic Systems?	Practice Day	<p><b>Each team needs:</b></p> <ul style="list-style-type: none"> <li>team Inquiry Chart</li> <li>pencils</li> <li>exploratory texts/media (see the “Ecosystem Resources” spreadsheet for ideas)</li> </ul> <p><b>Teacher needs:</b></p> <ul style="list-style-type: none"> <li>class Inquiry Chart (pond ecosystem)</li> </ul>	<p><b>Each team member needs:</b></p> <ul style="list-style-type: none"> <li>science notebook</li> <li>pencil</li> </ul> <p><b>Each team needs:</b></p> <ul style="list-style-type: none"> <li>1 copy of the “Blank Pond” pdf</li> </ul> <p><b>Teacher needs:</b></p> <ul style="list-style-type: none"> <li>“Blank Pond” pdf</li> <li>“Pond Drawing” pdf</li> <li>“Real Pond” image</li> <li>chart paper</li> <li>marker(s)</li> <li>computer/projector</li> </ul> <p><b>Setup:</b> see Day 9 lesson plan</p>

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<b>Day 10:</b> <b>What Is Algae?</b>	<b>Teacher needs:</b> <ul style="list-style-type: none"> <li>• chart paper</li> <li>• marker(s)</li> <li>• “Synthesizing” anchor chart to use as a model</li> <li>• class Inquiry Chart (pond ecosystem)</li> <li>• exploratory text, website, or eBook about pond ecosystems to model the strategy</li> </ul>	<b>Each team needs:</b> <ul style="list-style-type: none"> <li>• team Inquiry Chart</li> <li>• pencils</li> <li>• exploratory texts/media (see the “Ecosystem Resources” spreadsheet for ideas)</li> </ul> <b>Teacher needs:</b> <ul style="list-style-type: none"> <li>• class Inquiry Chart (pond ecosystem)</li> </ul>	<b>Each team member needs:</b> <ul style="list-style-type: none"> <li>• science notebook</li> <li>• pencil</li> </ul> <b>Each team needs:</b> <ul style="list-style-type: none"> <li>• access to the container of the green substance prepared by the teacher</li> <li>• 1 pipette</li> <li>• 1 petri dish</li> <li>• 1 set of “Chlorella vulgaris algae” images</li> <li>• paper towels</li> <li>• access to microscope</li> </ul> <b>Teacher needs:</b> <ul style="list-style-type: none"> <li>• 88ml (3 oz) container of the green substance (1 per team)</li> <li>• “What Does Algae Look Like” ppt</li> <li>• computer/projector (if using a digital microscope) or a standard microscope</li> <li>• containers of the green substance</li> <li>• pipettes</li> <li>• paper towels</li> <li>• “Chlorella vulgaris algae” images</li> <li>• plastic bags</li> <li>• 1 container to be used as a “catch bucket” for disposal of samples</li> </ul> <b>Setup:</b> see Day 10 lesson plan
<b>Day 11:</b> <b>Can Changes in a Food Chain Affect an Ecosystem?</b>	<b>Practice Day (Synthesizing)</b>	<b>Each team member needs:</b> <ul style="list-style-type: none"> <li>• science notebook</li> <li>• pencil</li> </ul> <b>Each team needs:</b> <ul style="list-style-type: none"> <li>• team Inquiry Chart</li> <li>• pencils</li> <li>• exploratory texts/media (see the “Ecosystem Resources” spreadsheet for ideas)</li> </ul> <b>Teacher needs:</b> <ul style="list-style-type: none"> <li>• class Inquiry Chart (pond ecosystem)</li> </ul>	<b>Each team member needs:</b> <ul style="list-style-type: none"> <li>• science notebook</li> <li>• pencil</li> <li>• pond ecosystem drawing from previous day</li> </ul> <b>Each team needs:</b> <ul style="list-style-type: none"> <li>• access to “Pond Ecosystem” ppt</li> </ul> <b>Teacher needs:</b> <ul style="list-style-type: none"> <li>• “Pond Ecosystem” ppt</li> <li>• projector/computer</li> </ul> <b>Setup:</b> see Day 11 lesson plan
<b>Day 12:</b> <b>What Is Scientific Evidence?</b>	<b>Practice Day (Synthesizing)</b>	<b>Each team member needs:</b> <ul style="list-style-type: none"> <li>• science notebook</li> <li>• pencil</li> </ul> <b>Each team needs:</b> <ul style="list-style-type: none"> <li>• team Inquiry Chart</li> </ul> <b>Teacher needs:</b> <ul style="list-style-type: none"> <li>• class Inquiry Chart (pond ecosystem)</li> </ul>	<b>Each team member needs:</b> <ul style="list-style-type: none"> <li>• science notebook</li> <li>• pencil</li> </ul> <b>Each team needs:</b> <ul style="list-style-type: none"> <li>• Team CER Chart</li> <li>• Team Data Log</li> </ul> <b>Teacher needs:</b> <ul style="list-style-type: none"> <li>• “Data Log Example” sheet</li> <li>• “CER Chart Example” sheet</li> <li>• “Shades of Green” color chart</li> <li>• “Algae in a Bottle” image</li> </ul> <b>Setup:</b> see Day 12 lesson plan

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<b>Day 13: Preparing for a Science Meeting (Part 1)</b>	<b>CULMINATING ACTIVITY (PART 1)</b>  <b>Each team needs:</b> <ul style="list-style-type: none"> <li>• science notebook with all documents, notes, etc.</li> <li>• materials to make chosen product, including traditional materials (e.g., paper and writing/drawing materials)</li> <li>• access to team Inquiry Chart, Team Data Log, and Team CER Chart</li> </ul> <b>Setup:</b> see Day 13 lesson plan		
<b>Day 14: Preparing for a Science Meeting (Part 2)</b>	<b>CULMINATING ACTIVITY (Part 2)</b>  <b>Each team needs:</b> <ul style="list-style-type: none"> <li>• science notebook with all documents, notes, etc.</li> <li>• materials to make chosen product, including traditional materials (e.g., paper and writing/drawing materials)</li> <li>• access to team Inquiry Chart, Team Data Log, and Team CER Chart</li> <li>• “Examples of How to Display Data” sheet (optional)</li> </ul> <b>Setup:</b> see Day 14 lesson plan		
<b>Day 15: The Science Meeting!</b>	<b>The Science Meeting</b>  <b>Each team needs:</b> <ul style="list-style-type: none"> <li>• team product</li> <li>• algae sample (optional, if needed for presentation)</li> <li>• timer or clock (optional)</li> <li>• sticky notes</li> <li>• pencils</li> </ul> <b>Setup:</b> see Day 15 lesson plan		