| **GAME LESSON** | |
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| Resources | **Lesson resources: Student Handouts:**   * [Game Link](https://pisces-s3.s3.amazonaws.com/prod/index.html) - [Do Needs / Don’t Wants](https://docs.google.com/document/d/1WAfoDKC8loKG5w1Bxy53GWuCe9x2g9mxBNcNB0qk_Xo/edit?usp=sharing) * [Teacher Dashboard](https://pisces-s3.s3.amazonaws.com/prod/teacherBuild/index.html) - [Story of Gameplay](https://docs.google.com/document/d/1dYK1Pq7OxjSWRodIiiRgJFucbm6hhCftn4oW1mnp0o8/edit?usp=sharing) * [Slides](https://docs.google.com/presentation/d/1nDyrDAp4U18LLfHG9kHUp1YaTPW-fX9RYzacxe0DGk8/edit?usp=sharing) - [Game UI](https://drive.google.com/file/d/1WDynQ9Y-zb_wNIwOTxU-tE_AAL_gvDIQ/view?usp=sharing) * [Dashboard Guide](https://drive.google.com/file/d/1fNBTWDxj0lPcczY48rwHWaCO1_P6xNF6/view?usp=sharing) **Rubrics** * [**Tips and FAQ**](https://drive.google.com/file/d/1ivX2nodSX_TXypDC4WibmvBiDPKzpA7M/view?usp=sharing) - [21st Century Rubric](https://drive.google.com/file/d/1zzpwfP2sj5at2aeEofVXlqPy-wVoftl7/view?usp=sharing)   - [PISA 2015](https://drive.google.com/file/d/11e9QH0peHvT6oqjHoz9OkCAjCU-JtA8A/view?usp=sharing) ([factors](https://drive.google.com/file/d/1gfODOOVw7JRMek-7UctfGLXZkn2hqTOE/view?usp=sharing), [framework](https://drive.google.com/file/d/15mG3yNvg7z_hPobS3nOZzFWiBlv8LSCt/view?usp=sharing))  **Process of Learning Tracker:**   * [Google form](https://docs.google.com/forms/d/11Dl8B6XLuEX_hyW6cr07B4gxBnU0SsAO1IaMzCAfJAc/edit?usp=sharing) ([doc](https://docs.google.com/document/d/1BKweZfNy0qwFVLxu7DBVLaUAPWUvdbPye1zmQOM1Q78/edit?usp=sharing), [sheet](https://docs.google.com/spreadsheets/d/1y-Ds-tY_SDloTt50_pC33HyufWLqWLeHP5GuuJIUQCY/edit?usp=sharing)) |
| Guiding Question | How do we win at *Little Fish Lagoon*?  How do we communicate effectively in teams?  What patterns of communication do you notice?  What are my strengths and weaknesses when working in groups? |
| Learning Goal | * Students will learn the outcomes of different game actions in *Little Fish Lagoon* * Students will experience a need to work together in order to accomplish a shared goal * Students will describe patterns of communication when collaborating with competitors |
| Lesson Flow  (60 min) | 1. (2 min) [Hook](https://vimeo.com/417368718): Explain that in this lesson, students will be trying to win at the game *Little Fish Lagoon*. Share the teaser to engage students.      1. (2 min) Essential Question: Share the guiding question with students, “How do we communicate effectively in teams?” and explain that we will think-pair-share a list of Dos and Donts before playing the game.      1. (6 min) Think-Pair-Share:  * Give students 2 minutes to individually list their “Do Needs” and “Don’t Wants”. Display questions:  | *What DO teams NEED when trying to communicate?* | *What DON’T teams WANT when trying to communicate?* | | --- | --- | |  |  |  * Give 90 seconds for pairs of students to share their lists with each other. * Have students share ideas with the whole group as you chart up a class list for another 2 minutes.   4. (30 min) Play Game: Distribute devices and create teams of 3. Provide them with their class codes and direct them to the URL using Chrome. Circulate and make note of communication patterns, gameplay strategies, or conversations that you’d like to share with the whole class.  5. (5 min) Have students individually retell the story of gameplay. What do they notice and wonder about the game?  6. (10 min) Discussion of game actions, communication patterns, and/or population dynamics.  7. (5 min) Closing Activity: Ask students to reflect on the visualization of their group’s communication during the game. Connect communication motifs from visualizations to patterns of behavior. |
| Vocabulary | Biology: Ecology, Population, Food Web, Sustainability  Economics: Common-pool resource, Renewable resource, Revenue, Income, Expense  Math: Visualization, Pattern, Optimization |
| Assessments, Reflection and Evidence of Student Learning | By the end of the lesson, students will have completed multiple rounds of *Little Fish Lagoon*. They will be able to participate in a discussion around game actions and reflect on possible winning strategies.  Students will be exposed to multiple communication patterns and have the opportunity to discuss their group communication visualization as it relates to the game context. |