

Smokies to Schoolyards

Curriculum to help teachers make learning more local, personal, and relevant

A Change of Perspective: *Mapping the Schoolyard*

INVITE your students to go on a journey with you, through maps of their community, their city, their state, their country, and the world. Ask them to compare and contrast all of the different maps, specifically why certain details are included on one map and are not on another. After examining all of the maps, ask your students what they would include on a map of their schoolyard and make a list on the whiteboard. Work together to draw a map of your school grounds that includes everyone's details.

EXPLORE Take your students outside with their journals, clipboards, pencils, and paper. Walk around the school grounds and ask your students to point out landmarks that they included in the initial map you drew together, as well as ones they would like to add. Then, ask everyone to discuss what the map would look like if they drew it from the perspective of an animal they frequently see outside. Divide your students into groups of 3 or 4, and ask each group to pick an animal that they would like to embody. (The animals might include anything from worms to ants to squirrels to birds, etc.) Next, have the groups explore the schoolyard, carefully observing the grounds through the perspective of their chosen animals.

WONDER As your students explore the schoolyard, ask them to brainstorm the following and make a list of responses: *What physical barriers would your animal encounter as it made its way across the schoolyard? What physical assets would your animal encounter? What would your animal classify as landmarks when creating a map of the schoolyard?*

CREATE Once the groups have a chance to brainstorm landmarks, barriers, and assets that their animals might find in the schoolyard, let them investigate the grounds further and create a map of the schoolyard that highlights these details. (Each group should only produce one map.) Remind your students to pay close attention to all of the physical features that they encounter. Encourage them to inspect any and all physical features that may act as a barrier or an asset for their animal, such as a bench, platforms, trees, a swingset, tall grass, etc. Instruct them to document these landmarks on their maps and label each as an asset or a barrier.

REFLECT Once all of the maps are complete, invite your students to find a spot to themselves somewhere in the schoolyard and take a few minutes to write in their journals, comparing and contrasting the two maps that they created. Some other question prompts include: *What is the relationship between your animal and the schoolyard? Has your view of the schoolyard changed since exploring and investigating it from the perspective of an animal? What barriers and assets did you discover during your investigation as an animal that you may not have considered as a human?*

Corresponding Science & Engineering Practices (SEPs):

- Asking Questions & Defining Problems
- Developing & Using Models
- Planning & Carrying Out Investigations
- Constructing Explanations & Designing Solutions
- Obtaining, Evaluating, & Communicating Information

Corresponding Crosscutting Concepts (CCCs):

- Patterns
- Scale, proportion, & quantity
- Structure & Function

Corresponding Disciplinary Core Ideas (DCIs):

- Life Sciences

SHARE Let your students share their creations by having each group place their schoolyard map in a circle. Give everyone a chance to walk around the circle and observe the differences and similarities among the various perspectives. After every map has been seen, sit in a circle with your students and have them share what they wrote in their journals during their solo reflections. Ask them to consider the following question and share their thoughts with a partner: *What would you change about the schoolyard to make life better for your animal? What would you change about the schoolyard to make life better for yourself?* If some students feel particularly passionate about any changes they would like to make, let them share their ideas with the whole class and encourage them to write their thoughts in their journals.

If you choose to do this activity with your class, please share your thoughts and your students' findings with Tremont Institute. We would love to hear how you implemented this activity and receive feedback on what worked and didn't work for your students.

Coordinating Academic Standards

English Language Arts

- SL.CC.1* – Prepare for and participate effectively in a range of conversations and collaborations with varied partners, building on others' ideas and expressing one's own clearly and persuasively.
- SL.CC.2* – Integrate and evaluate information presented in diverse media formats, such as visual, quantitative, and oral formats.
- SL.PKI.5* – Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
- W.RW.10* – Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

Science

- BIO1.LS1.1* – Compare and contrast existing models, identify patterns, and use structural and functional evidence to analyze the characteristics of life.
- BIO1.LS4.3* – Identify ecosystem services and assess the role of biodiversity in support of these services. Analyze the role human activities have on disruption of these services.
- ECO.LS2.3* – Create a model of an ecosystem depicting the interrelationships among organisms with a variety of niches. Use the model to explain resource needs of these organisms.

Social Studies

- SSP.01* – Gather information from a variety of sources, including graphic representations (e.g., maps, timelines, charts, artwork)
- K-2.SSP.06* – Develop geographic awareness by identifying geographic symbols on maps and globes
- 6-8.SSP.06* – Develop geographic awareness by analyzing locations, conditions, and connections of places and use maps to investigate spatial relationships; analyzing interaction between humans and the physical environment
- 9-12.SSP.06* – Develop geographic awareness by analyzing and determining the use of diverse types of maps based on the origin, authority, structure, context, and validity; analyzing locations, conditions, and connections of places and using maps to investigate spatial associations among phenomena