Michigan Grade Level Content Expectations and Common Core State Standards

EmPOWERKids K-2 - Electricity

The intent of this lesson is to utilize all components in the EmPOWERKids app and the supporting lesson materials. When all components are included, (in approximately 1-2 class sessions) the following GLCEs and CCSS could be addressed. The use of our app is meant to supplement your curriculum and not to replace it.

KINDERGARTEN

**SCIENCE**

**Inquiry Analysis and Communication**
- S.IA.00.12 Share ideas about science through purposeful conversation.
- S.IA.00.14 Develop strategies for information gathering.

**Inquiry Process**
- S.IP.00.12 Generate questions based on observations.

**ENGLISH LANGUAGE ARTS**

**Reading Standards for Informational Text (RI)**

**KEY IDEAS AND DETAILS**
- RI.K.1 With prompting and support, ask and answer questions about key details in a text.

**CRAFT AND STRUCTURE**
- RI.K.4 With prompting and support, ask and answer questions about unknown words in a text.

**INTEGRATION OF KNOWLEDGE AND IDEAS**
- RI.K.7 With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).
- RI.K.8 With prompting and support, identify the reasons an author gives to support points in a text.

**Speaking and Listening Standards (SL)**

**COMPREHENSION AND COLLABORATION**
- SL.K.2 Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering clarification if something is not understood.
- SL.K.3 Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

**Language Standards (L)**

**CONVENTIONS OF STANDARD ENGLISH**
- L.K.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

**VOCABULARY ACQUISITION AND USE**
- L.K.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.
- L.K.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts.

**SOCIAL STUDIES**

**Public Discourse, Decision Making, and Citizens Involvement**

**CITIZEN INVOLVEMENT**
- KP4.2.2 Participate in projects to help or inform others.
1ST GRADE

SCIENCE

Inquiry Analysis and Communication
• S.IA.01.12 Share ideas about science through purposeful conversation.
• S.IA.01.13 Communicate and present findings of observations.

Inquiry Process
• S.IP.01.12 Generate questions based on observations.

Earth Systems
• E.ES.01.11 Identify the sun as the most important source of energy.

ENGLISH LANGUAGE ARTS

Reading Standards for Informational Text (RI)

KEY IDEAS AND DETAILS
• RI.1.1 Ask and answer questions about key details in a text.

CRAFT AND STRUCTURE
• RI.1.4 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.
• RI.1.5 Know and use various text features (e.g., headings, table of contents, glossaries, electronic menus, icons to locate key facts or information in a text.)
• RI.1.6 Distinguish between information provided by pictures or other illustrations and information provided by the words of the text.

INTEGRATION OF KNOWLEDGE AND IDEAS
• RI.1.7 Use the illustrations and details in a text to describe its key ideas.

Speaking and Listening Standards (SL)

COMPREHENSION AND COLLABORATION
• SL.1.2 Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
• SL.1.3 Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.

Language Standards (L)

CONVENTIONS OF STANDARD ENGLISH
• L.1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

VOCABULARY ACQUISITION AND USE
• L.1.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content, choosing flexibly from an array of strategies.

SOCIAL STUDIES

Public Discourse, Decision Making, and Citizens Involvement

CITIZEN INVOLVEMENT
• 1-P4.2.2 Participate in projects to help or inform others.
2ND GRADE

SCIENCE

Inquiry Analysis and Communication
- S.IA.02.12 Share ideas about science through purposeful conversation.
- S.IA.02.13 Communicate and present findings of observations.

Inquiry Process
- S.IP.02.12 Generate scientific questions based on observations.

Fluid Earth
- E.FE.02.21 Describe how rain collects on the surface of the earth and flows downhill.

ENGLISH LANGUAGE ARTS

Reading Standards for Informational Text (RI)

KEY IDEAS AND DETAILS
- RI.2.1 Ask and answer such questions as who, what, where, when, why and how to demonstrate understanding of key details in a text.

CRAFT AND STRUCTURE
- RI.2.4 Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.
- RI.2.5 Know and use various text features (e.g., headings, table of contents, glossaries, electronic menus, icons to locate key facts or information in a text efficiently.)
- RI.2.6 Identify the main purpose of a text, including what the author wants to answer, explain, or describe.

INTEGRATION OF KNOWLEDGE AND IDEAS
- RI.2.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.

Speaking and Listening Standards (SL)

COMPREHENSION AND COLLABORATION
- SL.2.2 Recount and describe key ideas or details from a text read aloud or information presented orally or through other media.
- SL.2.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.

Language Standards (L)

CONVENTIONS OF STANDARD ENGLISH
- L.2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

VOCABULARY ACQUISITION AND USE
- L.2.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies.
- L.2.4e Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words or phrases.

SOCIAL STUDIES

Public Discourse, Decision Making, and Citizens Involvement

CITIZEN INVOLVEMENT
- 2-P4.2.2 Participate in projects to help or inform others.

MATERIALS

- Internet Access
- Projector/Screen
- Tablet (with EmPOWERed Kids app installed.) Lessons can be taught with as little as 1 tablet per classroom, but is intended to be utilized with one tablet per student/pair of students.

ANTICIPATORY SET

The content in the EmPOWERed Kids app presents high interest content that leads to investigations, raising questions, and the identification of current resources used for energy. Begin by engaging students with the EmPOWERed Kids app on the devices, following the teacher script.