MOBILE ⬡ ESCAPE

GRADE 6 CURRICULUM CONNECTIONS

SCIENCE

Energy: Understanding of the physical world is deepened by investigating matter and energy.

Learning Outcome: Students analyze forces and relate them to interactions between objects.

KNOWLEDGE	UNDERSTANDING	SKILLS AND PROCEDURES	MOBILE ESCAPE
Forces within an object are internal forces, including • tension • compression • shear • torsion Forces that act on an object from outside the object are external forces, including • applied force • friction • elastic or spring force	External and internal forces can change the shape, size, or position of objects that interact.	Conduct investigations to answer questions about the effects of external and internal forces on objects during an interaction. Identify forces that act on an object during an interaction. Use materials, tools, and equipment safely while experimenting with forces in interactions.	Students have the opportunity to interact, experiment, and identify different applications of force(s) in a controlled setting. Through interaction with the stations and then a facilitated discussion, the students will be able to identify how force is applied to materials to solve puzzles and challenges.

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Computer Science: Problem solving and scientific inquiry are developed through the knowledgeable application of creativity, design, and computational thinking.

<u>Learning Outcome:</u> Students examine abstraction in relation to design and coding, and describe impacts of technologies.

KNOWLEDGE	UNDERSTANDING	SKILLS AND PROCEDURES	MOBILE ESCAPE
The process of abstraction includes - determining what details to keep and what to ignore - removing unnecessary details - identifying important information - generalizing patterns	Abstraction is used in design and coding of computational artifacts to make problems easier to think about	Apply abstraction during the design process. Identify examples of abstractions encountered in daily life	The students will practice sorting information to extract relevant details in order to construct solutions to given problems. Students will sort, create, and apply relevant information in the designing of their own puzzles.

DIVISION 2 COMPETENCIES

COMPETENCY	MOBILE ESCAPE
<u>Critical Thinking:</u> - I pose questions to analyze information or evidence. - I begin to analyze complex issues and ideas based on criteria I help to develop. - I evaluate the effectiveness of my own thinking or that of others. - I make inferences, predictions, or decisions based on information. - I consider perspectives that do not fit with my understanding.	Through the exploration of problem solving in escape rooms and puzzle based stations the students have the opportunity to awaken their wonder by using their prior knowledge, make predictions and test out their conclusions. Wrapping up the activities with a debrief allows the students to reflect upon their experiences.
<u>Problem Solving:</u> - I acquire and select information to identify problems. - I generate solutions to complex problems based on criteria I help to develop.	The nature of the escape rooms provide an opportunity for students to solve problems in a group setting, while allowing for moments of individual contributions to shine

- I predict the possible outcomes of multiple courses of action.
- I identify impacts of possible solutions.
- I reflect on and revise approaches to solve challenges creatively.

through. Teamwork and resilience in trying out solutions are essential for success, while having a built in support system to ask questions to help guide the experience.

Research and Managing Information:
- I reflect on information gathering processes and revise if necessary.
- I gather and organize information from multiple sources to enhance or clarify understandings.
- I verify the accuracy of information collected from a variety of sources.
- I apply socially accepted protocols when using, sharing, and storing information.

Students are encouraged to interact with the puzzles by collecting puzzle pieces and using the gathered information to inform choices, communicate with their teammates, and make connections to find solutions.

Creativity and Innovation:
- I create in a variety of contexts and with a variety of audiences to enhance learning, develop abilities, or communicate an intent.
- I experiment with ideas, materials, or processes to express myself.
- I evaluate and adapt creative ideas, products, or services in response to emerging conditions.
- I understand that new challenges can help me develop resilience.

The experience allows for the students to create their own puzzle in the spirit of fun and challenge their peers while working within the limitations of guided puzzle creation, materials, environment, and time constraints while encouraging creativity.

Communication:
- I communicate with audiences in a variety of contexts to enhance learning, develop relationships, or complete tasks.
- I apply appropriate language conventions and protocols when receiving or expressing messages with varied audiences.
- I respect social or cultural practices in formal and informal situations when communicating with others.
- I consider the influence of emotions on behaviour, learning, and relationships when building shared understandings.
- I share interpretations of ideas or information logically and clearly, using effects to enhance communications.

Communication is essential for participation in the experience and is encouraged through the group work structure needed to overcome the challenges presented, as well as the students receive immediate feedback on their teamwork through the nature of success and failure of the challenges.

Collaboration:
- I exchange ideas and information respectfully when collaborating in digital or non-digital environments.
- I encourage or assist others to successfully

The collaborative nature of the escape room experience encourages students to have fun while working in a group setting and provides opportunities to exercise the

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fulfill obligations associated with roles and responsibilities to contribute to group success. ● I nurture positive relationships through compromise and being flexible. ● I demonstrate sensitivity and respect for diversity when working with others to achieve a common goal.	students role and responsibilities within the group.
Citizenship: ● I identify and apply approaches to reach shared understandings between differing perspectives. ● I use constructive decision-making processes to address individual or common interests. ● I initiate or organize activities or events that address a common need. ● I explain more than one perspective that is relevant to an idea, a decision, or an action.	Students are given the opportunity to exercise citizenship in a group setting in which collaboration is key to success and where individual strengths must be applied towards a common goal.
Personal Growth and Wellbeing: ● I develop and apply strategies to accomplish personal and common goals. ● I use personal skills and abilities, programs, or relationships to support growth and well-being. ● I examine potential risks to privacy or emotional safety when making healthy decisions. ● I develop or maintain social networks to support well-being. ● I perform multiple attempts and encourage others to persist with challenging tasks.	Through participation in the activities the students have the opportunity to exercise agency in new settings while having support to achieve success and enjoyment while demonstrating their resilience.

For more information about our curriculum connections please contact us directly at:

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