

GRADE 3 CURRICULUM CONNECTIONS

SCIENCE

Energy: Understandings of the physical world are deepened by investigating matter and energy.

Learning Outcome: Students investigate and explain how forces affect the movement of objects.

KNOWLEDGE	UNDERSTANDING	SKILLS AND PROCEDURES	MOBILE ESCAPE
<p>A force is a push or pull on an object resulting from an interaction with another object.</p> <p>Ways to apply a contact force to an object include</p> <ul style="list-style-type: none"> ● stretching ● pulling ● squeezing ● pushing <p>The direction of forces applied to objects can be described as</p> <ul style="list-style-type: none"> ● upward ● downward ● from the left ● from the right ● from both sides ● from all directions 	<p>Forces can affect properties and movement of objects in different ways.</p>	<p>Describe where forces may exist in everyday situations.</p> <p>Conduct investigations to demonstrate the effects of forces on the movement of objects.</p>	<p>Students have the opportunity to interact, experiment, and identify different applications of force(s) in a controlled setting.</p> <p>Through interaction with the stations and then a facilitated discussion, the students will be able to identify and describe how force is applied to materials to solve puzzles and challenges.</p>

MOBILE ESCAPE

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

Learning Outcome: Students investigate creativity and its relationship to computational thinking.

KNOWLEDGE	UNDERSTANDING	SKILLS AND PROCEDURES	MOBILE ESCAPE
<p>Computational thinking includes</p> <ul style="list-style-type: none"> • breaking a task into smaller chunks • finding patterns and similarities in tasks • identifying the important details when reading or solving a problem • designing instructions • working backward if a mistake is made 	<p>Computational thinking is a problem-solving process that uses creativity.</p>	<p>Create a set of instructions that could be followed by a human or a machine to complete a task.</p> <p>Identify computational thinking used to solve problems or achieve desired outcomes.</p>	<p>Students will have the opportunity to use computational thinking to find solutions to challenges and reflect upon the process.</p> <p>The students will design and create the steps to a puzzle in which a human will have to follow the steps.</p>
<p>Divergent thinking is the process of generating multiple unique ideas or solutions.</p> <p>Creativity is an important part of computer science, technology, and engineering; e.g., computer programming, robotics.</p> <p>Creativity involves combining, changing, or reapplying existing ideas to produce something new.</p>	<p>Creativity involves divergent thinking and can be used to develop different ways to achieve the same outcome.</p> <p>Creativity involves imagination, observation, and making connections.</p>	<p>Relate creativity to engineering, computing, and the development of new technologies.</p> <p>Create something new by combining, changing, or reapplying existing ideas.</p>	<p>Through the nature of puzzle solving, students will be able to compare and contrast multiple ways to arrive at similar solutions, as well as have the opportunity to apply their creativity in the construction of a new puzzle.</p>

MOBILE ESCAPE

COMPETENCIES

COMPETENCY	MOBILE ESCAPE
<p><u>Critical Thinking:</u></p> <ul style="list-style-type: none"> • I ask relevant questions to help me learn. • I use simple criteria to form opinions or make decisions. • I synthesize new understandings by comparing and contrasting information. • I reflect on contexts or experiences that influence my thinking. • I consider how my thoughts may be similar to or different from those of others. 	<p>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.</p>
<p><u>Problem Solving:</u></p> <ul style="list-style-type: none"> • I rephrase problems to clarify my understanding. • I determine information that is relevant to help me solve problems. • I consider the possible outcomes of solutions. • I work toward solving problems even when there are challenges. 	<p>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 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.</p>
<p><u>Research and Managing Information:</u></p> <ul style="list-style-type: none"> • I collect information for a specific audience or purpose. • I organize and combine information from a number of sources. • I consider the content of information to determine its use. • I reference the source of information when using someone else's ideas. 	<p>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.</p>
<p><u>Creativity and Innovation:</u></p> <ul style="list-style-type: none"> • I create in a variety of environments for specific audiences and purposes. • I seek out the knowledge or resources needed to transform my ideas into creative works. • I use individual or group brainstorming to build or expand my ideas. • I work toward achieving creative goals even when there are challenges. 	<p>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.</p>

MOBILE ESCAPE

<p><u>Communication:</u></p> <ul style="list-style-type: none"> • I communicate with peers and adults for specific purposes. • I use a variety of formats to communicate. • I use language structures and conventions that are appropriate for the context to interact with others. • I consider the contributions and feelings of others when exchanging ideas or information. • I paraphrase or restate messages to confirm understanding. 	<p>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.</p>
<p><u>Collaboration:</u></p> <ul style="list-style-type: none"> • I experience a variety of roles when engaging in collaborative activities. • I contribute actively and respectfully to group work. • I encourage others to contribute their points of view when working toward group goals. 	<p>The collaborative nature of the escape room experience encourages students to have fun while working in a group setting and rewards groups that collaborate effectively.</p>
<p><u>Citizenship:</u></p> <ul style="list-style-type: none"> • I consider similar or different points of view across a variety of contexts. • I consider positive and negative outcomes of decisions made in familiar contexts. • I fulfill obligations to my groups and communities. • I advocate for fair treatment of members of my groups and communities. 	<p>Students have the opportunity to explore their role in a group when faced with a challenge while representing themselves, their group, and their class.</p>
<p><u>Personal Growth and Well-being:</u></p> <ul style="list-style-type: none"> • I set goals to help address my wants or needs. • I connect available resources to choices and opportunities. • I recognize relationship boundaries. • I communicate how groups and individuals care for each other. • I adjust my actions in response to setbacks. 	<p>Through participation in the activities the students have the opportunity to exercise agency in new settings while having support to achieve success and enjoyment.</p>

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

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