

***A Note to Teachers:** The eLearning resources for gifted and talented students are designed to give you flexibility in how you present them to your students. You could choose to share them as they are or you can share targeted activities with students. The learning experiences are flexible within themselves and can be adapted to meet the needs of your students. While they are intended for gifted and talented students in grades 3-6, they can easily be adapted for use with older students. The learning experiences are set up with different focuses each day of the week, and each day is intended to give students a choice. The focus of the e-Learning is to provide students a challenging engagement outside of the classroom and is not intended to meet required minutes. The focus for each day is as follows:*

- *Monday's Maker Challenge. Students engage in learning experiences to create and make.*
- *Tuesday's Technology Challenge. Students engage with different technology tools to record and present their learning.*
- *Wednesday's Wonder Challenge. Students explore their own questions and wonderings.*
- *Thursday's Thinking Challenge. Students explore their choice of topics through a Genius-Hour format.*
- *Friday's Free Challenge. Students have the opportunity to learn something, be creative, develop old skills and learn new ones, and take action in their communities.*

Some of the activities have links to videos and websites; however, all of the learning experiences provide alternative instructions for students who may not have internet access.

Included in the resource is a note to parents to guide them through helping their students by asking questions and providing feedback.

Monday's Maker Challenge

Monday's Maker Challenge engages you in creative experiences that develop skills you will need to support your creative learning, including research. It is important that every creative act is an experiment. It may work out as you originally planned, but it could also take you in an unexpected direction that you did not think about and are not prepared for. But, it does not mean you are not successful. It means you are a thinker who is not afraid to take risks. Just remember that everything you try, no matter how it turns out, takes you closer to success. These activities will challenge you to use your creative mind, experiment, and make tons of mistakes. So, get creative! There are no bad ideas.

Note: Some of the learning experiences make suggestions of supplies. These are just suggestions. Be creative and use what is available to you in your home or yard. Think about recycling packaging your parents are throwing away from your kitchen and repurpose those (with your parents' permission, of course) for your experience.

Before you choose a learning experience, you need to decide how you will record your thoughts and demonstrate your learning. Will you use a notebook, Google Doc, pictures, or videos? Is there another way that you think of that you would like to record your learning?

Watch the following video before completing the first Maker Monday experience:

<https://www.youtube.com/watch?v=87xDdzcBlzc>

If you do not have access to the internet and cannot watch the video, no worries, you will be able to complete the learning experiences in a meaningful way in which you can be successful.

Choose one of the following maker challenges to complete. If you have access to online resources, you can click on the titles to watch a video to explain the experience. However, if you do not have online access, a written explanation has been provided for you below the title. (source ideas: John Spencer's You Tube channel)

Some of the learning experiences ask you to engage in research. You are probably familiar with traditional research through internet sources and books from your school or local library. However, if those resources are not available, there are other types of research that you can engage in. Think about what you do when you have a question and you try to answer it. Who are some of the people you ask about the question? What are some of the things you do to find answers to your question? You may want to create a survey to give your family or try out different ideas and compare them by creating a graph or taking pictures. Every time you try a new idea, you are conducting your own research. Even though you probably have an idea of how it will turn out, you do not know for sure what will happen. You can always run into unexpected problems. When you run into problems and come up with a way to solve them, you are conducting action research. What are some other ways that you can think of where you conduct research?

After completing a challenge, reflect on the following questions in whatever manner you have decided to record your learning:

- What worked?
- What didn't work?
- What would you do differently?
- What did you learn about the topic?
- What did you learn about yourself?

Mix it Up: You can also mix up your choices. For instance, instead of designing the ultimate treehouse or designing a school on Mars, you may want to design a treehouse on Mars. The possibilities are endless. You decide.

[Design a City in the Sky](#)

You are leading a team of engineers and architects to design the first city in the sky. When you plan your city, think about the things you do every day and you would be able to do these things in the sky. Take a minute and write down any questions, wonderings, and ideas that you have before you begin the project.

You are to create a physical model for a city that is located in the sky and is self-sustaining and ideal for life. Your model can be any form that you would like to use to create your city. It can be a 2-D detailed drawing, 3-D model constructed from recycled materials you find around your home, created in Minecraft, or is the setting of a story that you write. Write down a list of materials and supplies that you will need. Think about what items you already have around your home that you can use.

Be sure to record your thoughts and demonstrate your learning. You can use a notebook, Google Doc, pictures, videos, or anything that feels comfortable to you.

[Invent a City Underground](#)

Invent an underground city. Take a minute and write down any questions, wondering, and ideas that you have before you begin the project. One of the questions that you may need to answer is why are people living underground? Is it because they chose to live underground? Is there something that happened aboveground that forced them to live underground?

You are to create a physical model for a city that is located underground and is self-sustaining and ideal for life. Your model can be any form that you would like to use to create your city. It can be a 2-D detailed drawing, 3-D model constructed from recycled materials you find around your home, created in Minecraft, or is the setting of a story that you write. Make a list of materials and supplies that you can use. Considering using items you already have around your home.

Be sure to record your thoughts and demonstrate your learning. You can use a notebook, Google Doc, pictures, videos, or anything that feels comfortable to you.

[Design a Drone Delivery System](#)

You work for a delivery company that uses drones to delivery packages to people. However, drones are breaking, getting stolen, and landing unexpectedly on private property. You can no longer fly drones close to the ground. Your mission is to figure out how to drop packages from at least 4 meters (about 13 feet) above the ground without breaking packages. Think about the type of packaging and how it will be delivered. What will you need to consider? Write down your questions, wonderings, and ideas. Don't forget to come up with a plan to test your ideas and write these down. Remember, you may have to revisit your plan and make changes along the way, as you find things that work and things that do not work you like thought they would.

What materials do you need to test your packaging? Write a list of these in your plan. Think of items you can find around your home. Test your design for speed, accuracy, and security to prevent breaking.

Be sure to record your thoughts and demonstrate your learning. You can use a notebook, Google Doc, pictures, videos, or anything that feels comfortable to you.

[Create an Arcade Game](#)

Write down your questions, wonderings, and ideas. Don't forget to come up with a plan to test your ideas and write these down. Remember, you may have to revisit your plan and make changes along the way, as you find things that work and things that do not work like you thought they would.

What materials do you need to create your game? Write a list of these in your plan. Think of items you can find around your home. You may want to consider the following questions about rules, players, and materials.

Be sure to record your thoughts and demonstrate your learning. You can use a notebook, Google Doc, pictures, videos, or anything that feels comfortable to you.

[Design the Ultimate Tiny House](#)

Design your dream house, but it cannot be a mansion. It has to be small, very small. You get 250 feet to work with, and the height can be no taller than 10 feet. You have \$15,000.00 to spend on materials. Write down your questions, wonderings, and ideas.

Your first step is to create a floorplan. Consider how many rooms will be in your house and how you will convert one room to another room for a different use. For instance, how can you convert the kitchen to a bedroom when it is time to go to bed?

Your creation needs to include the following:

- a budget (If you do not have internet access, create a budget based on what you think the items would cost. Think if there are adults you can ask about how much things may cost.)
- make a model to scale (This means, for instance, that every inch of your model may represent 5 feet if the model were life size.)

Your model can be any form that you would like it to be. It can be a 2-D detailed drawing, 3-D model constructed from recycled materials you find around your home, created in an electronic format, or is the detailed setting of a story that you write. Make a list of materials and supplies you will need. Think about what you already have at home that you can use.

Be sure to record your thoughts and demonstrate your learning. You can use a notebook, Google Doc, pictures, videos, or anything that feels comfortable to you.

[Invent a Creature That Lives Inside and Active Volcano](#)

You are a scientist on an expedition studying volcanoes when you discover a creature that no one has ever seen before living inside an active volcano. When you return to your lab, you draw an annotated picture of the creature to explain to your lab partner what you discovered. Before you begin your drawing, what will you need to consider? Write down your questions, wonderings, and ideas.

Your lab partner is very interested in studying how the animal can actually survive in this environment. Draw a picture with this in mind and annotate its features in detail. Your drawing can be on paper or electronic or a collage from magazines, pictures, and newspapers.

Be sure to record your thoughts and demonstrate your learning. You can use a notebook, Google Doc, pictures, videos, or anything that feels comfortable to you.

[Design a City for Superheroes](#)

You have been approached by a comic book creator to design a city for the superheroes she has created. What will you need to consider? Remember that superheroes have different powers, so the city needs to be one they can live in. If the superhero's power is extreme strength, how is the city designed so that the superhero doesn't destroy everything she touches? Write down your questions, wonderings, and ideas.

Your city can be a 2-D detailed drawing, 3-D model constructed from recycled materials you find around your home, created in Minecraft, or is the setting of a story that you write. Make a list of materials and supplies you will need.

Be sure to record your thoughts and demonstrate your learning. You can use a notebook, Google Doc, pictures, videos, or anything that feels comfortable to you.

[Design a School on Mars](#)

Design and build a model school for people who are going to colonize or live on Mars. What will you need to consider? If you are not familiar with what the environment is like on Mars, think through how you could find out about it and include this in your plan. If you do not have access to the internet or to anybody who knows about Mars, just imagine what life on another planet could be like. Write down your questions, wonderings, and ideas.

It can be a 2-D detailed drawing, 3-D model constructed from recycled materials you find around your home, or is the setting of a story that you write. Make a list of materials and supplies you will need.

Be sure to record your thoughts and demonstrate your learning. You can use a notebook, Google Doc, pictures, videos, or anything that feels comfortable to you.

[Design the Ultimate Rollercoaster](#)

Design a model for the ultimate roller coaster that someone would enjoy riding. What will you need to consider? Think of the different types of people who may ride your rollercoaster. Write down your questions, wonderings, and ideas.

Your rollercoaster can be a 2-D detailed drawing, 3-D model constructed from recycled materials you find around your home, or a detailed part of a story that you write. Make a list of materials and supplies you will need.

Be sure to record your thoughts and demonstrate your learning. You can use a notebook, Google Doc, pictures, videos, or anything that feels comfortable to you.

[Invent a Sport](#)

Invent a new sport. What will you need to consider? Think about who will play, how they will play, and how it will end. Write down your questions, wonderings, and ideas.

It can be a 2-D detailed drawing or a 3-D model constructed from recycled materials you find around your home. Write down a list of materials that you need. Use at least four different items.

Be sure to record your thoughts and demonstrate your learning. You can use a notebook, Google Doc, pictures, videos, or anything that feels comfortable to you.

[Design the Ultimate Treehouse](#)

Design the ultimate treehouse. What will you need to consider? You may want to think through where the treehouse will be located and what type of tree it will be in. Write down your questions, wonderings, and ideas.

It can be a 2-D detailed drawing, 3-D model constructed from recycled materials you find around your home, created electronically, or is the setting of a story that you write.

What materials do you need to design your treehouse? Write a list of these in your plan. Think of items you can find around your home.

Be sure to record your thoughts and demonstrate your learning. You can use a notebook, Google Doc, pictures, videos, or anything that feels comfortable to you.

[Create an Eco-Friendly Kitchen](#)

Create an eco-friendly kitchen. Think about the things you currently use in your kitchen and consider how you will conserve these things in the new kitchen. Think about how the kitchen could change life on earth. What will you need to consider? Write down your questions, wonderings, and ideas.

Your kitchen can be a 2-D detailed drawing, 3-D model constructed from recycled materials you find around your home, or is the setting of a story that you write. Or, you can build a prototype of at least one item that belongs in the kitchen that accomplishes a kitchen-related task and produces zero emissions or waste.

What materials do you need to design your treehouse? Write a list of these in your plan. Think of items you can find around your home.

Be sure to record your thoughts and demonstrate your learning. You can use a notebook, Google Doc, pictures, videos, or anything that feels comfortable to you.

[Wildcard](#)

What would you like to make? Look around your home and make a list of materials that you could recycle and repurpose for your creation. Brainstorm what you can make using the items

you collected. Write down your questions, wonderings, and ideas. Analyze your ideas by combining ideas that are similar. Cross out any ideas you do not want to consider. Organize any ideas that may work well together.

Finally, make your product a reality by actually creating it.

Your product can be any form that you would like it to be. It can be a 2-D detailed drawing, 3-D model constructed from recycled materials you find around your home, created in an electronic format, or is the detailed setting of a story that you write.

Be sure to record your thoughts and demonstrate your learning. You can use a notebook, Google Doc, pictures, videos, or anything that feels comfortable to you.

Imagineering in a Box:

<https://www.khanacademy.org/humanities/hass-storytelling/imagineering-in-a-box/lesson-1-creating-worlds>

Remember, if you do not have access to the internet and cannot watch the video, no worries, you will be able to complete the learning experiences in a meaningful way in which you can be successful.

Design Your Own Land:

Thinking about the story behind the land

Imagine you are asked to design and build a land of your own. You could create a place you have dreamed of visiting (like a distant planet), a fictional place you imagine (like a cartoon land), or a story you want to bring to life (could be the setting of your favorite movie or book). Write down as many ideas as you can think of and pick your favorite idea later.

Thinking about the layout or setting of the land.

Start a rough draft of a map for your own land. Don't worry if you don't have the whole land planned out yet. You can leave a lot of blanks for future ideas. Focus more on the style of your map, what it looks and feels like. Think about the buildings that will be in your land. You may want to find or take some reference images which look similar to the buildings you imagine in your own land. You can use magazines, newspapers, or the internet. You can also sketch designs if you do not have access to references. You may want to organize these in the form of a storyboard with notes about each image, or you could create a digital collage or one in a notebook. The layout should also include a landscape of plants. Look for images of landscapes and plants to add to your collection of buildings. Remember, this is the land you have invented, so if you decide to invent a plant that does not exist, just sketch it out. You may also want to write out notes about the plants so people who are not familiar with them will have an understanding of them.

Write down any questions, thoughts, or wonderings you have about the buildings and plants. You may find a need now or as you continue to develop your land to research some information about these. For instance, if you have designed a unique building, you may want to research

architecture to find out if the building can actually be built. You may wonder about what the weather, soil, and temperature needs to be like for the plants you have chosen to survive. What other questions, thoughts, and wonderings do you have?

Think about the theme of your land.

Is your land from the past, present, or future? Is it in a large city or on another planet? These are some of the ideas you may want to consider when you decide on the theme. Write down any questions, thoughts, and wonderings that you have about the theme. What materials do you need to create the theme? Make a list of these and create a collage of material references in your land. You can do this physically, by collecting things from your environment to represent the surfaces, or you can do this virtually by finding images on the internet. What are some surfaces that you need to consider to develop the theme of your land? Think about the roofs, floors, doors, interior/exterior walls, and even small details such as door handles.

Show your collage, ideas, and thoughts to a friend or family member, either virtually or in person, and ask them what they can guess about your land from these ideas. Did they mention the time period, location, and story behind the land? Did their ideas match your vision? If there were difference, what details do you need to improve upon or change? Revisit your collage, ideas, and thoughts and make any changes that you think are necessary to express your intended theme.

Think about the colors in your land.

Sometimes color can help develop a theme. Create a color pallet for your land. Think about colors that help make you feel this way. Make a list of 3-5 key colors which will be used throughout your land and reflect the theme and atmosphere you hope to create. You can do this physically with paint or pencils, or you can select digital colors.

Will your land need any kinds of signs? Use the colors you chose to sketch these signs.

Think about the sounds in your land.

When people visit your land what will they hear? Think about the colors you chose and how you want people to feel. What sounds could help people feel this way? Think about and listen to your own environment. What are some of the sounds you hear? Are there sounds inside your home and sounds outside of your home? Are there constant background sounds in your land? Will people who visit your land hear a certain type of music being played? Are there random sounds that people will hear throughout your land? Create or describe at least three different sounds. You can create recordings of these sounds or write a detailed description of the sounds. Write down any questions, thoughts, and wonderings about the sounds people would hear in your land.

Think about the tastes and smells of your land.

To help convey the tastes and smells, sketch a simple one-page menu for a restaurant in your land. Think about how the design and food options of the menu make sense in your land. Write down any questions, thoughts, and wonderings about the tastes and smell people would experience in your land.

Think about the mood of your land.

Write down how you want people to feel when they visit your land. Will they feel calm, excited, or scared? Look back at the colors you chose for your land. Will the colors help to make people feel this way? If not, do you want to revise your colors or edit your mood. Besides colors, what else is needed to establish the mood? Write down any questions, thoughts, and wonderings about the mood people would feel in your land.

Create a mood board for your land by assembling all the references you have collected so far. Feel free to add additional images that help you visualize and feel the mood of your land. You can do this physically or digitally. Write down any questions, thoughts, and wonderings about the mood people would experience in your land.

Present the mood board to a friend or family. What background about your land do you think would be helpful for them to know? Share these things with them. Ask them what other things come to mind when looking at your mood board. Go back to your mood board and make changes by editing your thoughts, changing your ideas, or adding new ones to create the mood of your land.

Think about the people or characters in the land.

Make a list of people, animals, and/or characters in the land. Make notes about how they will support the theme of your land. It is important to get to know who your characters, animals, and/or characters are on the inside in order to better understand how they will look and act on the outside. Write down any questions, thoughts, and wonderings about the people, animals, and characters in your land.

Create rough sketches of your people, animals, and/or characters to get a sense of their shape and size. You may want to consider costumes and how they support the theme. Think about how your people, animals, and/or characters would move. Consider the different emotions people, animals, and/or characters would show and how they would express these. Feel free to use any materials to create this sketch, whether it is by hand or on the computer.

Tuesday's Tech Challenge

Tuesday's Tech Challenge introduces you to technology that you can use to support your learning and support your creative experiences. The most important focus is not your final product, but the process you will go through to experience the technology. Play around with it. Create with it. Learn how to use it to create your thoughts and ideas. When you use new technology for the first few times, every creative act is an experiment. It may work out as you originally planned, but it could also take you in an unexpected direction that you are not prepared for. But, it does not mean you are not successful. It means you are a thinker who is not afraid to take risks. Just remember that everything you try, no matter how it turns out, takes you closer to success. These activities will challenge you to use your creative mind, experiment, and make tons of mistakes. So, get creative! There are no bad ideas.

Note: These learning experiences require the use of technology. If you do not have access to the technology in each learning experience, choose another one. If you do not have access to any technology, choose another activity from one of the other days' challenges. Another option is for you to follow the alternative learning experience written below the title.

Before you choose a learning experience, you need to decide how you will record your thoughts and demonstrate your learning. You can use a notebook, Google Doc, pictures, videos, or anything that feels comfortable to you.

Choose one of the following technology challenges to complete. If you have access to online resources, you can click on the titles to take you to the webpage. However, if you do not have online access, an offline learning experience has been provided for you below the title.

After completing a challenge, reflect on the following questions:

- What did you learn to do?
- How will you use what you learned in the future?
- What would you like to know more about what you learned?
- What did you learn about yourself?

[Read a Current Event Article](#)

Choice of assignments:

- If you are familiar with the Depth and Complexity icons, choose at least three to use to annotate the article.
- If you are not familiar with the Depth and Complexity icons, create a three-column journal to capture your thinking. In the first column, record what the article says. This is where you write a quotation from the article that you think is important. Be sure to document the quotation by writing the page number beside the quotation. In the second column, write why you think the quotation is important to the entire article. In the third column, write why you think the quotation is important beyond the article. You may want to consider the ethical implications, changes in society, or lessons it teaches. You may also want to ask questions the quotation raises or make connections between the quotation and other things you have read, seen, or experienced.
- If you do not have access to the internet, choose an article from a newspaper, magazine, or nonfiction book that you have available and follow the instructions above to interact with what you read.

[Visit a Far Away Place](#)

Or, you may also choose to virtually visit a museum at the following links:

<https://www.msn.com/en-xl/lifestyle/travel/stuck-at-home-these-12-famous-museums-offer-virtual-tours-you-can-take-on-your-couch-video/ar-BB11i1xS>

<https://www.womenshistory.org/womens-history/online-exhibits>

Choose one of the following learning engagements to share your museum visit with other people, either in your class, your home, and/or your community.

- Plan a visit either for your family, school, or as a travel agent. Make a list of things you would need to plan for the trip. Think about including the following in your plan: a budget for the cost of the museum and travel to it, advertisements for the trip, a map for the museum and travel to it, a schedule for the trip, and anything else you can think of that you think would be helpful to someone going on the trip.
- Narrate a virtual tour of one of the museums and share it with your family.
- If you do not have access to the virtual tours, create a tour of your home. Include your backyard in the tour. If you are able to video your tour, you can narrate it as you take your audience on the tour. If you are not able to record your tour, draw a diagram of your home and write a script for the tour that you would take guests on, if they visited your home.

[Create a Story](#)

- Write an original story, or use one of the settings you created for Maker Monday Challenge to write a story about it. Use Toontastic to bring the story to life by creating a video of at least 30 seconds in length.
- If you do not have access to Toontastic, write your story on paper and bring it to life by creating a storyboard where you draw the settings, events, and happenings of the story. Be as imaginative as you would like.

[Create a Video Game](#)

- Use Scratch to create a video game. Share the video game with your family and ask them to give you feedback on it. This could be informal where you ask them to play it and simply tell you what they think about the video game or you could make a formal feedback form and ask your family to complete it after they play the game. After collecting your data from the feedback form, write a plan about how you will use the data you collected to improve the game.
- If you do not have access to Scratch, create a game. This could be a board game, sports game, or act out a video game you would create by using objects and people in your home. Gather items you can find around your home. Write down any questions, ideas, or wonderings you have. Think about some of the things you would want to know about a game before you played it.

Share the game with your family and ask them to give you feedback on it. This could be informal where you ask them to play it and simply tell you what they think or you could make a formal feedback form and ask your family to complete it after they play the game. After collecting your data from the feedback form, write a plan about how you will use the data you collected to improve the game.

[Illustrate a Scene From Your Favorite Book](#)

- Use AutoDraw to illustrate a scene from your favorite book or illustrate one of your ideas from Maker Monday Challenge.
- If you do not have access to AutoDraw, use paper to turn your favorite book into a graphic novel by drawing the different events and including dialogue and narrative explanations for each illustration.

Use Google Slides to Teach Someone How to Do Something

- Teach someone in your house to use one of the tech tools that you have used for Tuesday's Technology Challenge or anything else that you know how to do. You can use written instructions, a video, etc. Be sure to give your audience time during your presentation for them to practice what you are teaching them. You can share your presentation with someone in your house, or share it virtually with a family member, friend, or classmate. Before you create your presentation, plan what information you will need to include in it.
- If you do not have access to Google Slides, write a plan to teach someone how to do something that you have learned in another Challenge. You can use written instructions, a video, etc. Be sure to give your audience time during your presentation for them to practice what you are teaching them. You can share your presentation with someone in your house, or share it virtually with a family member, friend, or classmate. Before you create your presentation, plan what information you will need to include in it.

Design Something to Share

- Use Canva to create something to encourage someone or to tell someone thank you for something they have done for you and/or your family. This could be someone living with you, or you can share your creation electronically with a family member, friend, classmate, or teacher.
- If you do not have access to Canva, create something to encourage someone or to tell someone thank you for something they have done for you and/or your family. This could be someone living with you, or you can share your creation electronically with a family member, friend, classmate, or teacher. Gather items you can find around your home.

Learn a Language

- Create a free account in duolingo and learn a language. If you choose to complete this challenge, you can work on it multiple Tuesday's Technology Challenge. Decide how you will chart your progress. After each lesson, teach what you learned to someone in your house or to someone virtually.
- If you do not have access to duolingo, create your own secret language. You can use symbols for letters/words. Teach your language to someone in your house.

Wednesday's Wonder Challenge

Today is your opportunity to explore your own thoughts and wonderings. This may be a question you had when you engaged with an experience during Monday's Maker Challenge. Or, you may have a question to extend your learning from an assignment you had in math, ELA, science, social studies, PE, music, or art. Your question may be something that you have wondered about, or it may be something that includes your family. For instance, you may wonder what things were like when your grandparents were your age, or you may wonder what music your parents listened to growing up. Your question may be about something you are interested in. If you like to play sports, you may wonder how to shoot and make a three-point shot, or how to hit the ball further. If you are a musician, you may wonder what Beethoven's music would sound like if he composed it in the 20th century. If you are having trouble thinking of a wonder to explore, you may want to visit [Wonderopolis](#).

Spend some time brainstorming wonders. Keep a notebook, poster, or Google Doc where you can record and organize your wonders. Spend some time revisiting your list of wonders. Highlight the ones you are most interested in. Cross out the ones you have lost interest in. Draw arrows or create a key to combine topics that are similar and may be explored together.

After you have decided what wonder to explore, decide how you will explore it. Do you need to gather materials to create something? Do you need to conduct research about the topic? Do you need to interview someone to learn more about the topic? How will you record your exploration? Will you take pictures of the process? Will you record your learning by taking notes? It is important that every creative act is an experiment. It may work out as you originally planned, but it could also take you in an unexpected direction that you did not think about and are not prepared for. But, it does not mean you are not successful. It means you are a thinker who is not afraid to take risks. Just remember that everything you try, no matter how it turns out, takes you closer to success. These activities will challenge you to use your creative mind, experiment, and make tons of mistakes. So, get creative! There are no bad ideas.

If you decide to demonstrate your learning by creating something, and you need supplies, be creative and use what is available to you in your home or yard. Think about recycling packaging your parents are throwing away from your kitchen and repurpose those (with your parents' permission, of course) for your experience.

Some of your wonderings may lead you to engage in research. You are probably familiar with traditional research through internet sources and books from your school or local library. However, if those resources are not available, there are other types of research that you can engage in. Think about what you do when you have a question and you try to answer it. Who are some of the people you ask about the question? What are some of the things you do to find answers to your question? You may want to create a survey to give your family or try out different ideas and compare them by creating a graph or taking pictures. Every time you try a new idea, you are conducting your own research. Even though you probably have an idea of how it will turn out, you do not know for sure what will happen. You can always run into unexpected problems. When you run into problems and come up with a way to solve them, you are conducting action research. What are some other ways that you can think of where you conduct research?

Thursday's Thinking Challenge

Choose a video from the following website to watch, learn, and complete the learning extension opportunity for it.

<https://www.mensaforkids.org/teach/ted-connections/>

Before you choose a learning experience, you need to decide how you will record your thoughts and demonstrate your learning. Will you use a notebook, Google Doc, pictures, or videos? Is there another way that you think of that you would like to record your learning?

After completing a challenge, reflect on the following questions in whatever manner you have decided to record your learning:

- What worked?
- What didn't work?
- What would you do differently?
- What did you learn about the topic?
- What did you learn about yourself?

If you do not have access to the internet or cannot access the website, create your own Thinking Challenge by following the directions below and creating your own Genius Hour.

Your Own Genius Hour

If you could learn anything in school, what would it be? Fashion? Art? Music? Theatre? Write a blog about something you are interested in? Interview other people? Minecraft or Lego design? Video series to show someone how to do something? Invent something? Learn something new, such as coding? Solve Rubric's Cube? Create a science experiment? Or, could you think of a way to solve a complex global problem? Choose a topic based on your interest.

What will you need to consider? Write down your questions, wonderings, and ideas.

You may decide that you need to engage in research to explore your questions, wonderings, and ideas. You are probably familiar with traditional research through internet sources and books from your school or local library. However, if those resources are not available, there are other types of research that you can engage in. Think about what you do when you have a question and you try to answer it. Who are some of the people you ask about the question? What are some of the things you do to find answers to your question? You may want to create a survey to give your family or try out different ideas and compare them by creating a graph or taking pictures. Every time you try a new idea, you are conducting your own research. Even though you probably have an idea of how it will turn out, you do not know for sure what will happen. You can always run into unexpected problems. When you run into problems and come up with a way to solve them,

you are conducting action research. What are some other ways that you can think of where you conduct research?

You can create a 2-D detailed drawing, 3-D model constructed from recycled materials you find around your home, create a video, or write a story about your topic.

Share with your family what you have created and learned. Show your product to a friend or family member, either virtually or in person, and ask them what they think about your work. Based on the feedback you were given, what details do you need to improve upon or change? Revisit your product and make any changes that you think are necessary.

Be sure to record your thoughts and demonstrate your learning. You can use a notebook, Google Doc, pictures, videos, or anything that feels comfortable to you.

After completing a challenge, reflect on the following questions in whatever manner you have decided to record your learning:

- What worked?
- What didn't work?
- What would you do differently?
- What did you learn about the topic?
- What did you learn about yourself?

Friday's Free Challenge

This may be your only opportunity in your academic career to have complete freedom to choose whatever topic and project your heart desires. This is your chance to learn something, be creative, develop old skills and learn new ones, and take action in your community. The intent is that what you choose to create or explore will be accomplished over several days and not in a one-shot experience. You may set aside a few minutes each day or spend a larger amount each Friday to engage with the learning you have chosen.

The aims of Friday's Free Challenge are to encourage and enable you to:

- participate in a sustained, self-directed inquiry
- generate creative new insights and develop deeper understandings through investigation
- demonstrate the skills, attitudes and knowledge required to participate in self-directed learning
- communicate effectively in a variety of situations
- demonstrate responsible action through, or as a result of, learning
- appreciate the process of learning and take pride in your accomplishments.

The objectives state the specific targets that are set for learning. They define what you will be able to accomplish as a result of your study.

Your learning exploration will be broken into four parts:

- Planning
- Investigating
- Taking Action
- Reflecting

Planning

You need to document your learning. You can keep it as a Word document, Google Doc, create a webpage, blog, video, or use any format you like to maintain it. This is where you will plan and record the learning process of the project. By documenting your planning, you are demonstrating self-management skills. Your learning log or journal will be used throughout the process to document the development of your learning. It is an evolving record of intents, processes, and accomplishments. This is a place to record initial thoughts and developments, brainstorming, possible lines of inquiry and further questions raised. You can use it to record interactions with sources, for example teachers, family, and community experts. You should also use it to record selected, annotated and/or edited research and to maintain a bibliography. The learning log/journal is a place for storing useful information, for example quotations, pictures, ideas, or photographs, and is a means of exploring ideas and solutions. The important thing to keep in mind is that you, as the student, devise the learning log/journal in a format that suits your needs. The more thorough job you do documenting your learning and reflecting on it, the more opportunities there will be for you to receive formative feedback along the way. The following are suggestions (not requirements) to include in your learning log/journal:

- Brainstorming and thinking maps
- Notes, charts, and doodles
- Annotated research, including bibliographies or resources and notes on what you have learned
- Pictures and sketches
- Artifacts you may have collected through the process
- Explanations of how the research was used in the process
- Record challenges you faced and how you overcame them
- Questions that have come up in your process that you need to research or ask someone

Choose your learning. The first step in your planning is to choose your learning. Consider the following questions to get started:

- What is something that you have always wanted to learn but have never had the opportunity?
- What problems in our community (home, school, neighborhood, town) would you want to solve?

- How do you like to express yourself?
- What is something you could invent to improve the quality of life?

Develop a SMART goal. A SMART goal is one that is Specific, Measurable, Attainable, Relevant, and Time-based. Your goal should be one that you could accomplish, but that challenges your knowledge, skills or techniques in appropriate ways. Make sure that you can achieve your goal with the time and resources available to you. Discuss your goal with your teacher and parents to make sure it is realistic, not too simple, or too complex.

Develop your criteria for success. How will you know that your learning is successful? Not only do you get to choose your topic, but you also get to determine the criteria of its success. Jot down your thoughts about the criteria in your learning log/journal. These will change and develop as you get more involved in the process. It is okay to come back to these thoughts and revise them throughout the process.

Develop your process. Determine the steps you need to take to reach your goal and create a timeline to help keep you on task of achieving your goal by the deadline. Record this in your learning log/journal. It is okay to come back to your timeline and make adjustments as you need to in order to meet your needs throughout the process.

Investigating

As you begin your project, prior knowledge will influence your work. But you must show evidence of new learning throughout the process. Prior knowledge alone does not provide sufficient depth of inquiry for the learning experience. Therefore, research will be a necessary component of your project's process. The number and type of resources will vary depending upon the nature of your learning experience; however, you are encouraged to consult a variety of source types. Available sources may include: books and assignments from other subjects or classes, surveys you created and shared electronically, internet resources, video or audio recordings such as songs or movies, pictures, interviews conducted in person or electronically, newspapers, magazines, and television news.

You may want to consider the following questions when trying to decide if your source is credible:

- Who is the source's author?
- What makes the author an expert or knowledgeable on the topic?
- Who is the publisher?
- What is the date of the publication? (For a website, what is the date of when it was last updated?)
- What is the intended purpose?
- Is it easy to make out the author's opinions?
- Is the work a primary or secondary source?
- What have you learned from the source?

Citing your sources is important to ensure your learning experience's credibility. It also gives credit to the people whose ideas you are using/borrowing. Proper citation is necessary to avoid plagiarism. You must cite your research throughout the process in your learning log/journal.

Reflecting

Reflection should take place throughout the process and be recorded in your learning log/journal. You may want to consider the following the questions:

- What made your goal challenging?
- How did your personal interests influence your goal?
- What prior knowledge helped you begin your learning experience?
- What new understanding did you gain from your research?
- How did the criteria you created help you throughout your learning experience?
- How did you manage your time resources effectively?
- What challenges did you experience?
- How did you overcome the challenges you experienced?
- How did you choose to express your learning? Why did you choose to express it this way?
- How did your product/outcome meet each criterion that you developed?
- How can what you learned help you in other areas of your life?
- What did you learn about the topic you explored?

How would you teach what you learned today to someone else?

A Note to Parents: Parents are a vital part of their children's education. During e-Learning opportunities, this role becomes even more pronounced. The gifted and talented e-Learning activities are intended to provide gifted and talented students a challenging engagement outside of the classroom. Many of the learning engagements instruct the students to share their learning with their families, get feedback, and make revisions. Some learning activities ask students to teach their family what they have learned. This document is intended to help parents support their children as they engage in these experiences. The questions are organized by the titles of the learning experiences that students are given. Below each title are questions family members can ask students to help them think through their planning and improve their products. In addition to these questions, parents can help students think through the following questions that they are asked to reflect on after completing a learning experience:

- *What worked?*
- *What didn't work?*
- *What would you do differently?*
- *What did you learn about the topic?*
- *What did you learn about yourself?*

The instructions remind students that every creative act is an experiment. It may work out as they originally planned, but it could also take them in an unexpected direction that they did not think

about and are not prepared for. But, it does not mean they are not successful. It means they are thinkers who are not afraid to take risks. These experiences focus on the process, the act of actually thinking, doing, and creating. There is not a right or wrong way to engage in the experiences.

Some of the learning experiences make suggestions of supplies. These are just suggestions. Students are encouraged to be creative and use what is available in their homes or yards. Some suggestions are recycling packaging you are throwing away from your kitchen and repurpose those for the experience.

Monday's Maker Challenge

Design a City in the Sky

- *Where would people live?*
- *What would the building look like?*
- *What types of transportation would the people have?*
- *How would you take care of health and sanitation?*
- *How would they go to school? What would students learn?*
- *What types of technology would they use?*
- *What type of food would they have? How would they produce it?*
- *What would they do for fun? (sports, entertainment, etc.)*
- *How would the city be organized? What would the physical layout be?*

(These questions are meant for parents to help students think about the city they will create. They are not meant to be answered one by one.)

Invent a City Underground City

- *What is the culture like for the people who live in the city?*
- *What kind of food do they eat? How do they get the food?*
- *What kind of music do they listen to?*
- *What type of art do they create?*
- *What do the people believe? How do they communicate their beliefs?*
- *What values do the people have? How do they reward this?*
- *What stories do they tell?*
- *What types of buildings do they have? What is the architecture like?*
- *What is the layout of the city? How is it organized?*
- *What laws does the city have?*
- *What type of government do they have?*
- *What do the people do for fun and entertainment?*
- *How does the education system work? What types of subjects are taught?*
- *What types of technology do the people use on a regular basis?*
- *How does underground transportation work?*

- *What type of economy do they have? Include their money, jobs, and social classes.*

These questions are meant for parents to help students think about the city they will create. They are not meant to be answered one by one.

Design a Drone Delivery System

- *What type of padding will the packages need?*
- *What will the container need to be made out of? What shape will it need to be?*
- *How will you slow down the package when it is released from the drone?*
- *How will you test out your ideas?*

These questions are meant for parents to help students think about the city they will create. They are not meant to be answered one by one.

Create an Arcade Game

- *What will the rules be?*
- *How will you win? Will you earn points? Will there be a time limit?*
- *How will you make it fun?*
- *What will you do to engage players?*
- *Will it be for a single player or multiple players? Will players play on teams? Will players play against other players?*
- *What will the theme of the game be?*
- *How will it work?*

These questions are meant for parents to help students think about the city they will create. They are not meant to be answered one by one.

Design the Ultimate Tiny House

- *What features will the house have? Will it be fun or practical?*
- *What materials will you need?*
- *Where will it be located? The mountains? The beach? The desert? The tree? Inside a mountain? Underground?*
- *How will the location shape the architecture?*
- *How will you keep it cool or warm enough for the environment?*
- *Who will live in the house?*

These questions are meant for parents to help students think about the city they will create. They are not meant to be answered one by one.

Invent a Creature that Lives Inside an Active Volcano

- *What does the creature eat? How does it search for food?*
- *What adaptations does it have in order to live in the environment?*
- *What does its habitat look like?*

- *How does it live in the heat?*
- *Is it nocturnal or diurnal?*
- *What does it look like? Does it have legs, tail, gills, or scales?*
- *What are its features? Is it fast or slow? Does it fly, walk, or slither?*

These questions are meant for parents to help students think about the city they will create. They are not meant to be answered one by one.

Design a City for Superheroes

- *Where is the city located? Will it be hidden? Will the super heroes be hidden in it?*
- *How will you deal with each super heroes' power? If one of the super heroes' power is everything he touches burns, how is the city designed so that everything he touches doesn't burn down?*
- *What special features does the city have? What gadgets are need in the city?*
- *What will the city look like?*

These questions are meant for parents to help them think about the city they will create. They are not meant to be answered one by one.

Design a School on Mars

- *Where will your school be located on planet?*
- *How will you keep people safe while also making learning challenging?*
- *What subjects will students learn?*
- *How will it be different from your school on earth? What things from your current school will you get rid of?*
- *What special features will it have? What types of gadgets and technology will students use in it?*
- *What will the learning environment actually look like?*

These questions are meant for parents to help students think about the city they will create. They are not meant to be answered one by one.

Invent a Sport

- *What is the goal? How will you win? Will you score points? Will it be timed? Will the game end with a score or when players reach a final destination?*
- *Is it a team or individual sport?*
- *What positions will players have? What will players do during the game?*
- *What are the rules? What will be allowed and forbidden?*
- *Will it be played on a court or field? What are the dimensions?*
- *Is it played in or out doors?*

These questions are meant for parents to help students think about the city they ill create. They are not meant to be answered one by one.

Design the Ultimate Treehouse

- *What kind of tree will it be in?*
- *Consider what is available at the location where the treehouse will be.*
- *What will its design be? What will it look like? What shape will it be?*
- *What features will it have? Will it have a bridge, staircase, windows, trapdoor, furniture?*
- *What will you do for fun in the treehouse? Will it have a television, board games, ping-pong table, library, maker space, water balloon launcher.*

These questions are meant for parents to help students think about the city they will create. They are not meant to be answered one by one.

Create an Eco-Friendly Kitchen

- *What items can you reuse and repurpose?*
- *How can you conserve water?*
- *What features would reduce and reuse waste?*
- *How will you harvest power from the sun?*
- *How will you reduce electricity use?*

These questions are meant for parents to help students think about the city they will create. They are not meant to be answered one by one.

Wildcard

- *What will your product be?*
- *How will it work?*
- *What problem will it solve?*
- *How will you make it?*
- *Who will be the ideal audience?*

These questions are meant for parents to help students think about the city they will create. They are not meant to be answered one by one.

Imagineering in a Box

- *What kind of land will you create?*
- *What is the name of the land*
- *What is a story that takes place in this world?*
- *What do you imagine happening in this world?*
- *How do you want this world to make people feel?*
- *What is the theme the story is about?*
- *What do you imagine it feels like to be in your land?*
- *What do you imagine people might learn when visiting your land?*
- *What do you want them to think about after leaving your land?*
- *What landscape would be in the land?*
- *What does the plant life tell you about the land and how does it make you feel?*
- *How do these images reflect the theme and story of your land?*

- *What are your characters' names?*
- *Where do your characters live?*
- *Are your characters from the past, present or future?*
- *What do your characters want or need?*
- *What do your characters fear or dislike?*
- *What do your characters eat for breakfast? How do they eat it?*