

CONTENT-SPECIFIC INSTRUCTIONAL ACTIVITIES Supporting Students at Home

Grades 9-12

Overview

This guide is designed to provide content-specific instructional activities for student use when schools are closed for inclement weather or other unexpected events. The activities listed below are intended to help keep our students intellectually active while they are at home.

The activities and tasks that students complete at home will not be used as assessment or counted toward a part of the students' final quarter grade. Families should review the list below and select options that are relevant, accessible, and age-appropriate.

Secondary Social Studies

- Enjoy some time with Crash Course Contents (https://www.youtube.com/user/crashcourse). You can use U.S. History, World History, Government, Economics, and more. Start by watching topics you have already learned about in class, but feel free to explore. Be sure to try and identify the claims made in the video and the evidence used to support those claims. Once you have watched an episode, consider researching to find another source you may use as the "Mystery Document." Explain why you chose this document and how it relates to the episode you just watched.
- It's _____ History Month! Research the achievements of a successful person being celebrated this month in a field you find interesting and reflect on the following questions:
 - O What did they achieve?
 - What obstacles did they face? How did they overcome those obstacles?
 - What do you find inspiring about this person?
- Play GAMES (https://www.icivics.org/games)! There are many games that cover everything from media literacy to history to the functions of government. Be sure to spend some time with Do I Have a Right? to see if you know your Constitutional Rights.
- Enrolled in American Government? Take some time to try the <u>HSA Practice Test</u> (https://hsapracticetest.measuredprogress.org/student/login).
 - Username: practicegovernment
 - Password: student
 - Don't want to spend all day on the internet? Try it on paper! (uploaded in the google folder)
- Choose a video from Frontline Films (https://www.pbs.org/wgbh/frontline/films/) that connects to what you are learning about in school. See this document for some thinking questions and activities.
 - What new information did you learn?
 - How does it connect to what you have already learned about this topic, region, issue?
 - What claims does the video raise? What evidence do they use to support their claim?
 - O Do you find the thesis compelling? Why or why not?

- What questions does this source raise? How could you go about continuing your research in this area?
- Start a public policy debate with your family. Choose a topic, conduct research, and then try to come up with a plan for how you might address the public policy concern using this guide Then research how your solution compares with proposed solutions from the legislative and/or executive branch of government. Possible topics:
 - Should Native American nicknames/mascots be banned from high school, college, and professional sports teams?
 - Should Supreme Court members be elected by the people instead of appointed by the President [with Senate approval]?
 - Should the practice of physician-assisted suicide be allowed?
 - It is currently a law that you can be forbidden Federally subsidized students loans for college [such as Stafford and Perkins loans] if you have a prior conviction for drug use, drug possession, or drug dealing. Do you think that this should remain a law?
 - Many states have hate crime legislation. Under such laws, crimes motivated solely because of someones race, sex, religion, or sexual orientation are given stiffer and mandatory penalties.
 How do you feel about those types of laws?
 - Is it good policy for schools to ban the sale of soft drinks, candy, and other questionably nutritious snacks in order to promote better eating habits?
 - As a means of preventing terrorist activity, do you have a problem with the Federal government having access to your e-mail account, library records, and other personal information?
 - A *much* higher percentage of Australians (88 percent) vote in elections than Americans (about 50%). Many believe that this is due to the fact that Australians who do not vote must pay a fine, typically \$20. Should the United States enact similar measures?
 - Are professional athletes overpaid, or is this simply a situation where highly skilled and scarce athletes are paid according to supply and demand?
 - Should the United States attempt to spread the principles of democracy throughout the World, or should we let the other countries of the World decide for themselves?

Secondary ELA

- Read your anchor text or a book of your choice. Use the Reader Response Questions below to demonstrate your understanding. Consider responding to one question for every 20 minutes of reading:
 - What connections are there between the book and your life? Explain.
 - What are the most important sentences/paragraphs/passages in this book? The most important event or feeling? Explain.
 - What is the best part of the book? Why? What is the worst part? Why?
 - What parts of the book seem most believable or unbelievable? Why?
 - What makes you wonder in this book? What confuses you?
 - In what ways are you like any of the characters? Explain.
 - Do any of the characters remind you of friends, family members, or classmates? Explain.
- Additional Resources;
 - Independent Reading Prompts: https://tinyurl.com/IRprompts
 - Journal Prompts: https://tinyurl.com/jrprompts
 - Mixed Genre-Choice Board: https://tinyurl.com/wrchoice

Creative Writing Prompts. Challenge yourself to respond to one of these prompts and then share your writing with someone.

- Attach an image (photo, magazine, etc.) to a notebook page and write about it.
- What things will people in the future say about how we live now? (Examples: They ate that? They believed that?)
- Imagine a future in which we each have a personalized robot servant. What would yours be like? What would it do? What features would it have?
- What does your name mean? Free write about names: names you like, names you do not like, how a name can affect a person's life, how you feel about your own name, why your parents chose your name, etc.
- Imagine that someone says to you, "Because that's how we've always done it!" Write this out as a scene. (Think: Who said it, what were the circumstances, how did you respond, etc.)
- Think about your strongest emotion right now (irritation, boredom, happiness, contentment, etc.) and find five quotes about this emotion.
- List six true sentences that begin with the words "I'll never forget..."
- List ten places in the world that you would most like to visit and 10 places you would never want to visit and explain why you selected each place.
- Explore books that have been made into films. What differences can you note? What creative ways did the director bring the text to life? Feel free to use this resource https://www.goodreads.com/list/tag/book-to-film
- Review the lyrics to one of your favorite school appropriate songs. Identify three devices that are used within the song and explain their use and impact. Devices include simile, metaphor, hyperbole, symbolism, rhyme, rhythm, mood, and tone.
- Engage in SAT prep practice using Khan Academy (https://www.khanacademy.org/).
- Find news articles of interest on Newsela (available in Clever in https://hcpss.me/). Read the article and respond to the questions.
- Read a series of articles about a topic of interest in Room for Debate (https://www.nytimes.com/roomfordebate). Capture your ideas using this downloadable template (https://tinyurl.com/rfdtemplate).
- Find a person or topic of interest within the website Humans of New York (https://www.humansofnewyork.com/). After learning about this individual, respond to one of the prompts in the Non-Fiction Writing Choice Board (https://tinyurl.com/nfwchoice).
- Access articles from CommonLit (https://www.commonlit.org/) that align with the theme of your current unit and respond to the questions provided. Use the Library tab and search by Theme to find grade-level resources.

Secondary Science

Indoor/Discussion:

- Find a thinking partner. This can be a parent or a sibling. Maybe it's a friend who you can call or text. People always think better when they have someone else with whom to share ideas. Try discussing an engineering problem that you both find interesting. Compare your solutions to determine the qualities that make one better than another under certain constraints.
- Talk with your family about how science affects your everyday life. Is there a particular science topic that interests you? Pick something that <u>really</u> interests you. Consider how you might investigate it to learn more.
 - Is there data from a reputable source on this topic of interest?
 - Can you draw a model to help you understand more?

- Are there solutions you can think of for a particular engineering problem?
- o Take some time to record these and evaluate the advantages and disadvantages of each.

Outdoors:

- Observe a natural phenomenon like the weather, sun, moon, clouds or the sunset.
 - O What do you notice?
 - O How does the process change over time?
 - Record your observations over a period of hours (in the case of clouds) or days (in the case of the weather and sunset).
- Start/maintain an "Earth Journal." This can be as simple as snapping a photo from a window each day to capture the constant cycling of our environment to something more complex that includes formalized observations of a chosen phenomenon. Choose something that inspires you. You don't need a special notebook. No special formatting. Just record what you see/hear/experience.

Online:

Read a science article, view a video, or listen to a recording of your choice from the Online Resources
listed below. After accessing one of the resources, respond to the follow up questions within your
science notebook or journal. What excites you about this topic that others need to know? Explain
scientific phenomena or ideas to family members or friends after engaging with this information.

Online Resources:

- Science News for Students provides age-appropriate, topical science news to learners, parents, and educators (https://www.sciencenewsforstudents.org).
 - Additional Option: Find a job that interests you and read the article to learn more (https://www.sciencenewsforstudents.org/collections/cool-jobs).
- Investigate episodes of Maryland Public Television's (MPT) Outdoor Maryland, NOVA, Nature and a variety of other shows. These are available by going to the MPT website (www.mpt.org) or by tuning into MPT on your television.
- Explore the NSF Science Zone free app and web-available audio and video from the National Science Foundation (NSF) (https://www.nsf.gov/news/special_reports/apps/).
- Review current topics posted related to animals, conservation and research the National Aquarium in Baltimore conducts (https://www.aqua.org/blog).
- Read an overview of some of the missions currently underway at the NASA Goddard Space Flight Center (https://www.nasa.gov/content/goddard-missions-present).
- Select an article on environmental and earth topics from the National Oceanic and Atmospheric Administration (https://www.noaa.gov/education/resource-collections).
- Identify a phenomena from the list from Phenomena- The Wonder of Science (https://thewonderofscience.com/phenomenal) and watch the accompanying video OR identify a phenomena from the natural world around you. Use the prompts for *Phenomena Inquiry* below and record in your science notebook/journal.

Phenomena Inquiry:

Use the NGSS Inquiry Cards (http://bit.ly/NGSSInquiryCards) or complete the following for a phenomena in your notebook/journal:

- Describe the phenomena.
- What questions do you have about the phenomena?
- Construct a model (such as diagrams, drawings, mathematical relationships, analogies, computer simulations, and physical replicas) to represent ideas and explanations.
- Analyze and interpret data provided about the phenomena.
- Construct an explanation about the phenomena.

- Reason and argue based on evidence to identify the best explanation for a natural phenomenon or the best solution to a design problem.
- Obtain, evaluate, and communicate the information clearly and accurately to a family member or friend.

World Language

- Study vocabulary from current and previous units of study.
- Use Scrabble or Bananagram letters or make your own letter cards to create a crossword puzzle containing as many target language words as you can.
- Write as many words as you can think of in the target language on cards. Create simple sentences with the words. Challenge yourself to make the sentences longer.
- Create a board game or a card game in the target language to review topics from current and/or previous units of study.
- Write in the target language. Choose a prompt from the list provided below. Respond to the prompt in writing, in the target language. Have fun with it, be creative, and don't be afraid to take linguistic risks.
 - Write simple captions for pictures or photos.
 - Label familiar people, places, and objects in pictures.
 - Write the physical or personality traits of a character in a book or film.
 - Write the sequence of events from a story you have read or a film you have seen.
 - Write a book or film review.
 - Write a short story. Be as descriptive as possible and include several actions to move the story along. Illustrate your story.
 - Write a short note, text, or e-mail to a friend about upcoming plans.
 - Create and illustrate a chart of things you like and dislike, or label the things you like and do not like in a picture.
 - Write a list of desirable and undesirable characteristics in a friend.
 - Make a simple poster to campaign for a person or event.
 - Pick something (a place, a thing, or an idea) and describe it as thoroughly as you can.
 - Write and illustrate an advertisement for something (a product or a service).
 - Write a product review.
 - Write and illustrate a comic strip.
 - Write a dialogue between two people. Or, take it a step further and write a short skit.
 - Write jokes or riddles.
 - Write a short poem. It doesn't need to rhyme.
 - Write a song.
 - Write instructions on how to do something.
 - Write a short gratitude note. What are you grateful for today? Express your thanks with words of appreciation.
- **Speak** in the target language.
 - Read aloud your written responses to the prompts completed in the previous list. If you can, record your responses.
 - Count in the target language as you complete activities from the <u>Physical Education</u> choice board.
 - After you have completed one of your <u>Secondary Mathematics</u> tasks in English, read the numbers aloud in the target language.

- Read in the target language for at least 15 minutes per day. Maintain a reading log. Write and/or speak in the target language about what you have read, keeping in mind the Can-Do expectations for your proficiency target (Novice Low, Novice Mid, Novice High, Intermediate Low, or Intermediate Mid).
 - Review NCSSFL-ACTFL Novice Can-Do Statements for reading and writing (https://www.actfl.org/sites/default/files/CanDos/Novice%20Can-Do_Statements.pdf).
 - Review NCSSFL-ACTFL Intermediate Can-Do Statements for reading and writing (https://www.actfl.org/sites/default/files/CanDos/Intermediate%20Can-Do%20Statements.pdf).
 - Refer to your textbook or to links on your class Canvas page for potential readings.
- **Listen** to and/or **view** authentic resources in the target for at least 15 minutes per day. Maintain a listening/viewing log. Write and/or speak in the target language about what you have heard/viewed, keeping in mind the Can-Do expectations for your proficiency target (Novice Low, Novice Mid, Novice High, Intermediate Low, or Intermediate Mid).
 - Review NCSSFL-ACTFL Novice Can-Do Statements for listening/viewing and writing (https://www.actfl.org/sites/default/files/CanDos/Novice%20Can-Do Statements.pdf).
 - Review NCSSFL-ACTFL Intermediate Can-Do Statements for listening/viewing and writing (https://www.actfl.org/sites/default/files/CanDos/Intermediate%20Can-Do%20Statements.pdf).
 - Refer to your class Canvas page for links to potential items to listen to and/or view.
 - Watch a movie or show in the target language, without subtitles.
 - Listen to the radio or a podcast in the target language.
- CHALLENGE Complete an activity from the <u>ESOL</u> task list or another content area's task list, in the target language.
- SUPER CHALLENGE After you have completed one of your <u>Secondary Language Arts</u> tasks in English, complete it in the target language.

GT Research

- Continue working on the research tasks assigned by your teacher.
- Locate and read an article on your research topic using MackinVIA or the HCLibrary available from <u>hcpss.me</u> or by using Google Scholar. Summarize the source content and evaluate its validity and reliability.
- Compare the effectiveness of several different "keyword" searches on your research topic.
- Develop questions for an interview that would further your research knowledge base or contribute to your primary research. Identify the purpose of the interview and the person to be interviewed.

Secondary Mathematics

- Complete some of the following mathematical challenges:
 - Old Order (Source: https://nrich.maths.org/5009) Gus is older than Flora. Alessandro is older than Zara but younger than Flora. Oliver is younger than Gus but older than Zara. Yvette is younger than Gus. Alessandro is older than Oliver. Flora is younger than Yvette. Can you list these 6 friends in order of age?
 - Multiplication Mistake (Source: https://nrich.maths.org/12792) Jane made a mistake when writing down a multiplication problem, and she multiplied by 54 instead of 45. Her answer was 198 more than it should have been. What number did she multiply 54 by? How do you know?
 - Penny Collections (Source: https://www.youcubed.org/tasks/penny-collection) Consider a collection of pennies with the following constraints: When the pennies are put in groups of 2 there is one penny left over. When they are put in groups of 3, 5 and 6 there is also 1 penny

left over. But when they are put in groups of 7 there are no pennies left over. How many pennies could there be?

- What would be the next number that would also work in this situation? Can you find a rule for finding all of the solutions?
- How many pennies are in your collection if you had 1 penny left over when you put your pennies in groups of 2, 3, 4, 5, and 6, and no pennies left over when you put your pennies in groups of 7?
- Always a Multiple (Source: https://nrich.maths.org/alwaysamultiple)
 - Charlie said: "Alison, think of a 2-digit number. Reverse the digits and add your answer to your original number. I bet your answer is a multiple of 11."
 - Alison chose 42. She added 24 and got the answer 66. Allison replied, "It is! How did you know that?"
 - Charlie said: "I'm not sure. Let's try to work it out."
 - Try a few examples for yourself. Do you always get a multiple of 11? Explain.
- Long List (Source: https://nrich.maths.org/11726) Can you write a list of integers containing 2 square numbers, 2 prime numbers, and 2 cube numbers? What is the smallest number of integers that could be on the list? Show your work.
- Equal Means (Source: https://nrich.maths.org/11697) Find the value of x that makes the mean of the first three numbers in this list equal to the mean of the last four:

15 5 *x* 7 9 17

- Closer to Home (Source: https://nrich.maths.org/13835) Consider the graphs with equations y = 2x 10 and y = x 6. Which comes closer to the origin? Can you find the shortest distance between this line and the origin? Show your work.
- Square LCM (Source: https://nrich.maths.org/6763) The highest common factor of two positive integers m and n is 12, and their lowest common multiple is a square number. How many of the five numbers, n/3, m/3, n/4, m/4 and mn, are square numbers? Explain your reasoning.
- What's Possible (Source: https://nrich.maths.org/whatspossible) Many numbers can be expressed as the difference of two perfect squares. For example, $20 = 6^2 4^2$, $21 = 5^2 2^2$ and $36 = 6^2 0^2$. How many of the numbers from 1 to 30 can you express as the difference of two perfect squares?
 - What do you notice about the difference between squares of consecutive numbers?
 - What about the difference between the squares of numbers which differ by 2? By 3? By 4?
 - When is the difference between 2 square numbers odd? Even?
 - What do you notice about the numbers you CANNOT express as the difference of 2 perfect squares?
 - Can you prove your findings?
- o Identify a real-world situation and determine an appropriate function model (e.g. linear, quadratic, exponential, logarithmic, logistic, sinusoidal, step, absolute value functions) for the situation. Construct various representations for your situation such as a table, graph, and/or equation. Determine an appropriate domain and range for the function based on the context.
- Online Activities/Support:
 - Explore Khan Academy materials that enable personalized practice aligned with mathematics course curriculum. Video-based lessons, reviews, practice problems, and quizzes are provided.
 Login is not required, however, parents/guardians can sign up as the 'Coach' for a child to monitor their progress.

- Algebra I: https://www.khanacademy.org/math/algebra
- Geometry (and Geometry GT): https://www.khanacademy.org/math/geometry
- Algebra II (Algebra II GT, and Advanced Algebra & Functions): https://www.khanacademy.org/math/algebra2
- Business Calculus GT: https://www.khanacademy.org/math/calculus-1
- Mathematics Analysis and Precalculus Honors (& GT): https://www.khanacademy.org/math/precalculus
- Trigonometry Honors: https://www.khanacademy.org/math/trigonometry
- AP Statistics: https://www.khanacademy.org/math/ap-statistics
- AP Calculus AB: https://www.khanacademy.org/math/ap-calculus-ab
- AP Calculus C (Multivariate Calculus Calculus BC):
 https://www.khanacademy.org/math/ap-calculus-bc
- Linear Algebra GT: https://www.khanacademy.org/math/linear-algebra
- Differential Equations GT: https://www.khanacademy.org/math/differential-equations
- SAT Prep: https://www.khanacademy.org/test-prep/sat
- Visit the HCPSS Family Mathematics Support Center (http://hcpssfamilymath.weebly.com) for additional online resources, including instructional videos and practice/review exercises that are available and organized by mathematics course.
- Explore creative and inspiring mathematical tasks that allow students to make connections between math and the real world using Youcubed Mathematical Tasks (https://www.youcubed.org/tasks). Tasks are designed to encourage mathematical reasoning and sense-making while allowing students to think creatively.
- Locate graphs and describe what the graph depicts. Critique the graph and determine if the graph makes sense for the given context. (http://pbs.panda-prod.cdn.s3.amazonaws.com/media/assets/wgbh/rttt12/rttt12 int graphstories/index.html).
- Consider a short video or audio clip describing an action (http://www.graphingstories.com).
 How might the action be modeled graphically? Sketch a graph with appropriate axes labels to model the action.
- Find or create a geometric pattern (http://www.visualpatterns.org). Use multiple representations to show how the pattern is growing: words, graph, table, visual, or algebraic expression. Show the connections between the representations using color-coding, arrows, and words.

Art

In your sketchbook or on a piece of paper, use available drawing supplies to complete a few of the following activities:

- Create several drawing studies of eyes, noses, and mouths in a variety of poses.
- Draw an interesting object from three different angles.
- Draw three metallic objects that reflect light. Focus on highlights and reflections.
- Refraction—Create two drawings of separate objects partially submerged in water.
- Draw something that can not be turned off.
- Draw something soothing.
- Draw something you think sounds or smells incredible.

Supporting Web Links -

Inside a Stranger's Sketchbook, By Jordan Kisner The New Yorker
 (https://www.newyorker.com/books/page-turner/inside-a-strangers-sketchbook)

- Art Sketchbook Ideas: Creative Examples to Inspire High School Students (https://www.studentartguide.com/articles/art-sketchbook-ideas)
- PBS Learning Media (https://mpt.pbslearningmedia.org/subjects/the-arts/visual-art/)

Music

- Using standard notation, draw three major scales and play or sing them.
- Using standard notation, draw three minor scales and play or sing them.
- Create a rhythm pattern using household items while keeping a steady beat.
- Listen to a song and describe the form of the song using refrain/chorus.
- Listen to a song and discuss your own personal critique with someone in your family.
- Pick a theme song for your day and describe why you selected the song.
- Identify rhythms that are created naturally in your home.
- Create a 4-bar melody and play or sing it.
- Create a 4-bar, 2-voice counterpoint.
- Continue to practice and review class music (if applicable).

Health Education

Use wh	at you already know about communication, body language, and the importance of
health-	enhancing decisions to complete the following learning tasks about assertiveness and refusal
skills.	
•	Create a cartoon or comic strip that teaches kids/teens about assertiveness and refusal skills. Your project should be at least three panels in length. You may use an online comic generator such as www.makebeliefscomix.com , or create a paper comic
	strip like the template.
•	Write a persuasive speech presentation to convince your community why they should be using
	assertiveness and refusal skills. Include background information, facts, and tips about using
	these skills. Your speech should be approximately two to three minutes in length.
•	Create a brochure about assertiveness and refusal skills. Use
	illustrations, graphics, and color to enhance the project. Your brochure

Physical Education

Complete at least one of the following physical activities each day. Break as needed during each activity. Encourage someone from your family to participate with you.

should be easy to read, neat, concise, and include bulleted information.

Remember, a brochure is just a piece of paper folded into thirds.

30-minute brisk walk with an adult	100 jumping jacks	1 yoga video from Cosmic Kids Yoga	1 workout from the workout website
		(https://www.cosmickids .com/)	Darebee (<u>https://darebee.com/</u>)

100 curl-ups	5 sets of 10 push-ups or Hold push up position for a total of 90 seconds.	100 air squats	3 videos from Go Noodle (https://family.gonoodle.com/)
Crazy 8's - 8 jumping jacks, 8 high knees 8 scissor jumps. Repeat 8 times	50 lunges	5 sets of 1-minute planks	50 burpees
YouTube Workout Video (https://www.youtube.com/watch?v=L_A_HjHZxfl)	100 air kicks and 100 air punches	15-minute jog with an adult	30-minute bike ride with an adult
100 high knees	15-minute dance party	15 minutes of stretching, hold each stretch for 30 seconds.	20-minute workout of your choice

After completing the physical activity of your choice, select one of the following questions to discuss with a friend or family member:

- Would you recommend this activity to a friend? Explain why or why not.
- Rate this workout using the perceived rate of exertion scale (RPE). Explain your answer.
- If you were going to do this workout again, what would you do to make it more enjoyable?

Library Media

- Read a variety of genres and formats. Digital materials are available in MackinVIA from hcpss.me and from HCLibrary available from hcpss.me. Print materials may be available from the school library and HCLS branches.
- Generate questions about a topic of personal interest or curricular relevance. Conduct research using the Big6 process or another inquiry process to answer those questions.
- Explore digital publishing materials such as WeVideo and G-suite.

ESOL

- Access images from The New York Times What's Going on in this Picture
 (https://www.nytimes.com/column/learning-whats-going-on-in-this-picture) and complete the following activities:
 - List or describe what you see in the image
 - Summarize what you think is happening in the image
 - Write a creative caption for the image
- Access https://newsela.com, select a Pro/Con article and complete the following task:
 - Write a response that states your opinion and reasoning
- Access WeVideo in https://hcpss.me/. Record yourself speaking about one of the following topics:
 - Summarize any book you have read or listened to
 - Summarize a news article or news report you have read or watched
 - Persuade a friend to watch a television show or movie you have watched
- Read or listen to any text in English and complete the following tasks:

- Summarize the text you read or listened to orally or in writing
- Create a mini-poster to advertise the text to a classmate
- Respond to one of the following persuasive writing prompts:
 - Should students be able to grade their teachers?
 - o Can cellphones be educational tools?
 - Does TV capture the diversity of America yet?
 - What musician or actor should be a superstar, but hasn't quite made it yet?
 - Should all sports athletes make the same salary?
 - What author do you think deserves an award?
 - Can money buy you happiness?
 - What is the best movie of the past year?
 - Which is more important, talent or hard work?
 - How much technology time is too much?