

INTRODUCING

<https://www.remc.org/21things4students/>

an Open Educational Resource
designed for grades 5-9 & used K-12

ABOUT 21T4S		INDEX		TEACHERS		MITECHKIDS		21 THINGS4STUDENTS	
	1 - Basics		8 - Troubleshooting		15 - Design Thinking				
	2 - Visual Learning		9 - Search Strategies		16 - Career Prep				
	3 - My Digital Life		10 - Digital Images		17 - Creative Communications				
	4 - Suite Tools		11 - Powerful Presentations		18 - Digital Storytelling				
	5 - Digital Footprint		12 - Interactives		19 - Buyer Beware				
	6 - Cyber Safety		13 - Dig the Data		20 - Global Collaboration				
	7 - Be Legal & Fair		14 - Social Networking		21 - Computational Thinking				

FREE! RESOURCES TO HELP BUILD TECHNOLOGY PROFICIENCY FOR STUDENTS

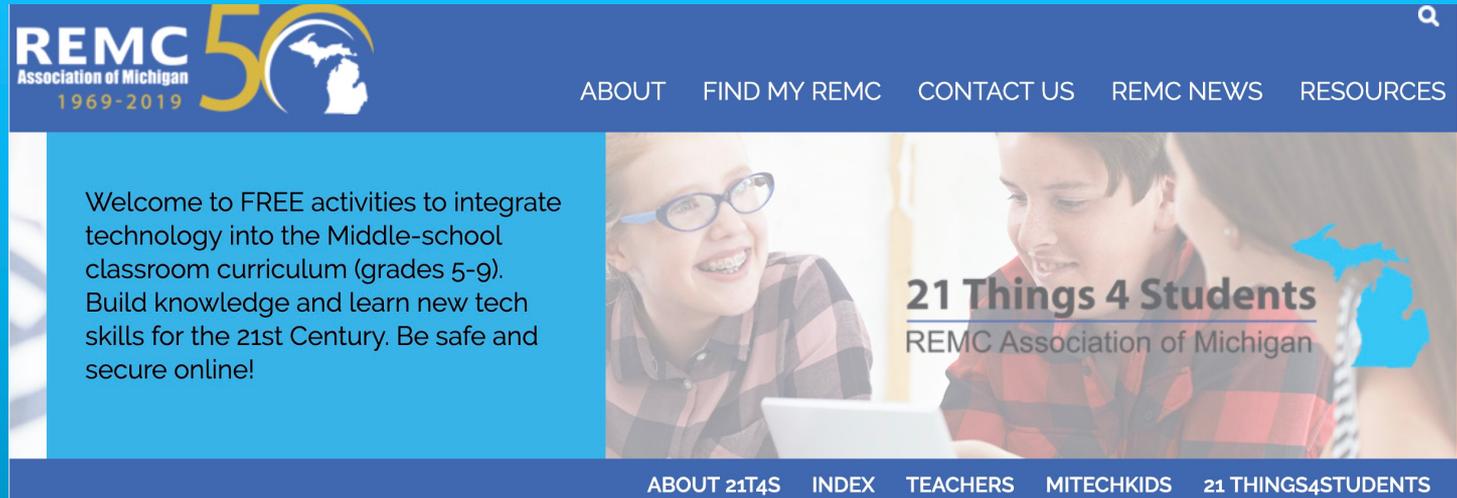
Over 5 million students use these resources both in Michigan and globally

The content is aligned with Michigan Technology Competencies, MITECS, and International technology Standards for students, ISTE.



*Providing positive classroom
and online learning experiences

'21Things' made up of 130 Quests = Fun projects that build technology skills



The screenshot shows the top portion of the REMC Association of Michigan website. The header is dark blue with the REMC 50th anniversary logo (1969-2019) on the left and a search icon on the right. A navigation menu includes 'ABOUT', 'FIND MY REMC', 'CONTACT US', 'REMC NEWS', and 'RESOURCES'. The main content area features a blue sidebar with a welcome message and a large image of three students looking at a laptop. The image is overlaid with the text '21 Things 4 Students' and 'REMC Association of Michigan' next to a small map of Michigan. A secondary navigation bar at the bottom of the main content area includes 'ABOUT 21T4S', 'INDEX', 'TEACHERS', 'MITECHKIDS', and '21 THINGS4STUDENTS'.

REMC
Association of Michigan
1969-2019

ABOUT FIND MY REMC CONTACT US REMC NEWS RESOURCES

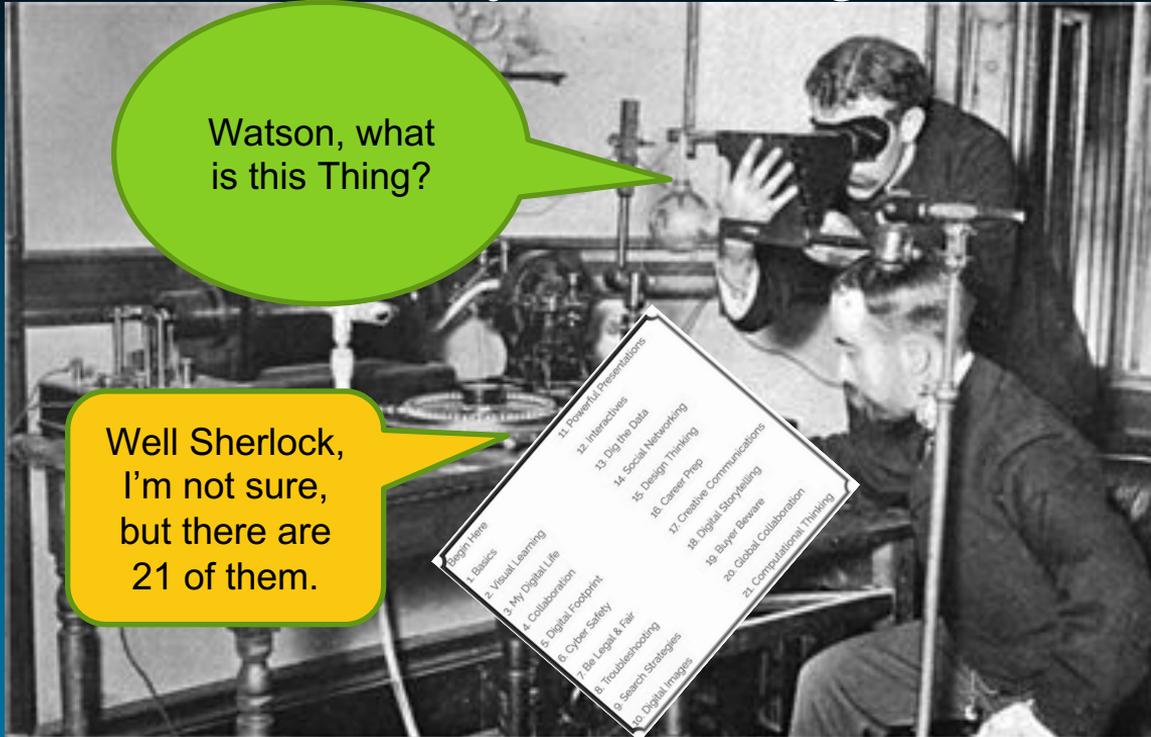
Welcome to FREE activities to integrate technology into the Middle-school classroom curriculum (grades 5-9). Build knowledge and learn new tech skills for the 21st Century. Be safe and secure online!

21 Things 4 Students
REMC Association of Michigan

ABOUT 21T4S INDEX TEACHERS MITECHKIDS 21 THINGS4STUDENTS

4 Parts separated on the [Independent Learning Page](#)

Anatomy of a Thing



21 THINGS are 21 BIG IDEAS

ABOUT 21T4S

INDEX

TEACHERS

MITECHKIDS

21 THINGS4STUDENTS



1 - Basics



2 - Visual Learning



3 - My Digital Life



4 - Suite Tools



5 - Digital Footprint



6 - Cyber Safety



7 - Be Legal & Fair



8 - Troubleshooting



9 - Search Strategies



10 - Digital Images



5. Digital Footprint

Q1 Managing Your Footprint

Q2 Your Evolving Footprint

Q3 Web Presence

Q4 Getting Social

Q5 Balancing My Media



14 - Social Networking



15 - Design Thinking



16 - Career Prep



17 - Creative Communications



18 - Digital Storytelling



19 - Buyer Beware



20 - Global Collaboration



21 - Computational Thinking



Anatomy of a Thing

Each Thing page has:

- Top animated video or image
- Introduction
- Learning Objectives
- Side menu showing the Quests
- Teacher Guide
- Learning Objectives Slide
- Resources
- Print to pdf ability



The screenshot shows the 'Anatomy of a Thing Page' for the topic '7. Be Legal and Fair'. The page header includes the title 'Anatomy of a Thing Page' and '21 Things 4 Students REMC Association of Michigan'. A navigation bar contains links for 'ABOUT 21T4S', 'INDEX', 'TEACHERS', 'MITECHKIDS', and '21 THINGS4STUDENTS'. The main content area features a video player with a play button and a 'Direct link to the video' text below it. To the right is a side menu with a list of 21 quests, where '7. Be Legal & Fair' is highlighted. Below the video is an 'INTRODUCTION' section with text about copyright and fair use. Further down is a 'LEARNING OBJECTIVES' section with four numbered points. At the bottom right, there are links for 'Teacher Guide', 'Learning Objectives Slide', and a 'Print this page' button.

Anatomy of a Thing Page 21 Things 4 Students
REMC Association of Michigan

ABOUT 21T4S INDEX TEACHERS MITECHKIDS 21 THINGS4STUDENTS

7. Be Legal and Fair

Top video or image

21 THINGS4STUDENTS

Begin Here

1. Basics
2. Visual Learning
3. Cloud Initiation
4. Collaboration
5. Digital Footprint
6. Cyber Safety
- 7. Be Legal & Fair**
 - Q1 Copyright Laws
 - Q2 The Source
 - Q3 Plagiarism
 - Q4 Stop the Pirates
 - Be Legal and Fair
 - Graduation
8. Troubleshooting
9. Search Strategies
10. Digital Images
11. Powerful Presentations
12. Interactives
13. Dig the Data
14. Social Networking
15. Design Thinking
16. Career Prep
17. Creative Communications
18. Digital Storytelling
19. Buyer Beware
20. Mobile Computing
21. Coding and Game Design

Direct link to the video

INTRODUCTION

Technology has brought about a potential crisis. It seems that a lot of artwork, literature, and music by our most creative authors, musicians, and artists have fallen into the hands of pirates. Our artists can no longer support themselves nor feel safe in creating new work. Their work is being shared all over the Internet as we speak. We need to put a stop to this. What would happen if your favorite musicians stopped writing and publishing their music? Do you want to listen to the music of your grandparents? That's where this assignment comes in.

For this Thing you will find out what we can do to make sure creative work remain under proper control. You will investigate the laws of copyright and report your findings back to your teacher. You will also need to find out if there is a way to legitimately use the work done by others so that you are not accused of operating illegally. Your assignment includes spreading the word so that others know the rules. When you have made a creative work of your own you will check it for originality and you will also learn of a way to protect that work so that you will be

LEARNING OBJECTIVES

When you have completed this Thing you will:

1. know about copyright and fair use (Digital Citizen)
2. understand the social responsibility of using copyrighted materials (Digital Citizen)
3. know how to recognize and avoid plagiarism (Digital Citizen)
4. know how to use creative commons licenses (Digital Citizen)

Teacher Guide

Learning Objectives Slide

Websites and Applications

Print this page

QUESTS FEATURE

- Animated video introductions
- I Can statements
- Learning objectives and key vocabulary
- Step by step directions and tutorials
- Pre and post quizzes
- Meet MITEC technology competencies important for success in school, work, and life
- Student checklists for each Quest



Teacher Guide

6. Cyber Safety Quest 8: Stop the Bully

Check off	Description
<input type="checkbox"/>	Watched the introductory video on Cyber Safety Q8 Nobody likes a bully
<input type="checkbox"/>	Read the Introduction, Key Vocabulary and I Can Statements
<input type="checkbox"/>	Took the Quizlet Key Vocabulary Quiz
<input type="checkbox"/>	Reviewed what was learned in Cyber Safety
<input type="checkbox"/>	Created a project that shows themes of Cyber Safety, preventing Cyber safety, & Netiquette

Digital
Portfolio
of
Projects



Q1 Managing Your Footprint

5. Digital Footprint

21 THINGS4STUDENTS



Direct link

INTRODUCTION

This Quest is all about your digital footprint and the amount of media you use to achieve daily. In the process you will also compare your media usage with class...

KEY VOCABULARY

Digital footprint: On the Internet, a digital footprint is the word used to describe the digital or footprints that people leave online. Social media means anytime you do or write online there will remain a trace even if you delete it.

Media Usage: Media usage is the sum of information and entertainment on the Internet used by an individual or group.

I CAN STATEMENTS

- manage my digital footprint
- graph my media usage
- understand the importance of empathy and social responsibility

STEPS

Part 1: What is your footprint?

1. Visit this introduction to a [Digital Footprint from TeacherTube](#) or Your [Digital Footprint](#) (YouTube 3:20) about the impact of your Digital Footprint.
2. Watch [5 Ways to Make a Positive Digital Footprint](#) (4:18 YouTube)

1. Introduction
2. Digital Learning
3. My Digital Life
4. Suite Tools
5. Digital Footprint

6. Q1 Managing Your Footprint
7. Q2 Your Evolving Footprint
8. Q3 Web Presence
9. Q4 Getting Social
10. Q5 Balancing My Media
11. Digital Footprint Graduation
12. Cyber Safety
13. Be Legal & Fair
14. Troubleshooting
15. Search Strategies
16. Digital Images
17. Powerful Presentations
18. Interactives
19. Dig the Data
20. Social Networking
21. Design Thinking
22. Career Prep
23. Creative Communications
24. Digital Storytelling
25. Buyer Beware
26. Global Collaboration
27. Computational Thinking

- 5. Q1 Student Checklist
- Quizlet- Managing Your Footprint Quiz



THINGS



COMPLETING THIS QUEST

Once you have run several documents through the plagiarism check questions, save the document to your File Space.

- Check this Quest off the 21t4s roadmap
- [I have completed this Quest and am ready to Stop the Pirates](#)



Some of the Goals for Creating the 21things4students

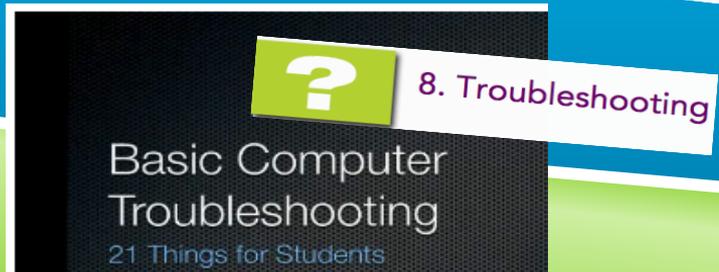
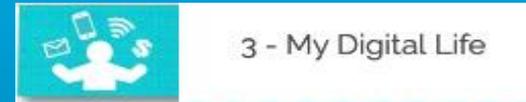
GOAL 1

Help students become “Empowered Learners” by improving technology skills

Set and reflect on
Personal Learning
Goals



Q2 Image Magic
10. Digital Images



	Keyboard keys	Mission accomplished	Mac	PC
1	Select text quickly	Select an entire word Select an entire sentence (or even paragraph)	Double click on a word And then try triple click	Double click And then click
2	Copy Paste	Copy something And then... Paste it. Hold down the Control or Command key and press the key indicated	⌘C ⌘V or F4	Ctrl c Ctrl v

GOAL 2

Help students learn to be safe and smart online and be good “Digital Citizens”



Q3 Scams
Buyer Beware

Q6 Safe & Secure
1. Basics



19. Buyer Beware

Q1 Compare Products
19. Buyer Beware



Username &
Passwords

Q7. Email
1. Basics

5. Digital Footprint



Q4 Web Presence
5. Digital Footprint



GOAL 3

Help students think critically about online resources and use them to effectively to create and construct artifacts



Bookmarking

9. Search Strategies

Q1 Michigan eLibrary

Q2 Safe Searching

Q3 Web Site Evaluation

Q4 Citing Your Source

Q5 Fake or Real News



Fake or Real News



17. Creative Communications



Q4 Promote Yourself
16. Career Prep



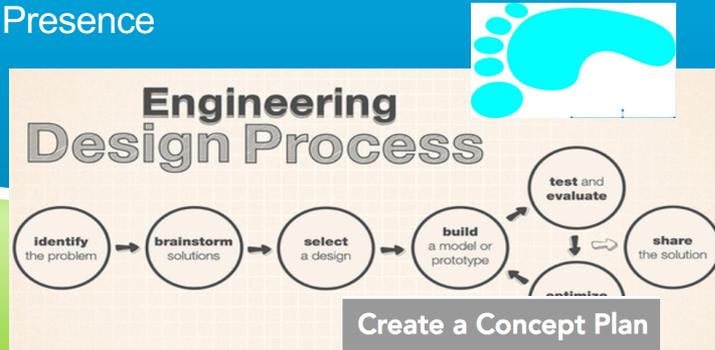
GOAL 4

Help students engage in problem-solving, planning and design thinking

2. Visual Learning and 5-step Engineering Process



5. Digital Footprint and Planning a Web Presence



15. Design Thinking

- Q1. What is Design Thinking?
- Q2. What's Your Problem?
- Q3. Big Ideas
- Q4. Prototypes
- Q5. Test & Improve
- Q6. Reflect & Share

21. Computational Thinking

- Q1 What is Computational Thinking?
- Q2 Decomposition
- Q3 Patterns
- Q4 Abstraction
- Q5 Algorithm
- Q6 Evaluation

GOAL 5

Help students discover and use tools and strategies for collecting and analyzing data

 **WolframAlpha** computational knowledge engine
Start by clicking on Examples to

Q3 Interactive Study Tools
12. Interactives

Text Compactor
Free Online Automatic Text Summarization Tool

 **SummarizeThis™**



13. Dig the Data

Part 1 Spin and collect the data

Part 2 Formulas

Q6 Spin Out

13. Dig the Data

Part 3 Analysis, prediction and global results

Part 4 Delivery Problem (advanced option)



Q7 Just Function (Fx)

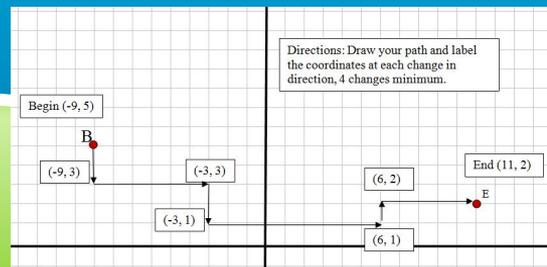
Car Cruising

Cell Phone

Hungry Mungry

Q8 Whiskers

Q9 Changes Over Time



9. Search Strategies

GOAL 6

Help students learn to express themselves creatively using a variety of media tools chosen appropriate to the goal

17. Creative Communications

Q1 Applications

Q2 The Main Idea

Q3 Creating Your Digital Artifact

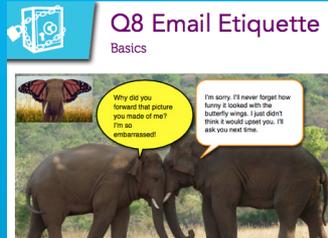
Q4 Remix

Gold What is the Message?

Gold Empower Student Voice With Flipgrid

Q3 Digital Self Portrait

10. Digital Images



Q10 Sharing Your Presentation
11. Powerful Presentations

GOAL 7

Help students learn to make positive contributions as collaborators in local and global communities



Q4 Presentation Collaboration

11. Powerful Presentations

I Can Statement

- collaborate online to create a presentation

Group work roles

Working and Creating a Presentation Together

2. Visual Learning

Q1 Fire Rescue

2. Visual Learning



Q8 Email Etiquette

Basics



20. Global Collaboration

Q1. What is a Global Collaborator?

Q2. Collaborating With Other Cultures

Q3. Speaking Out About Global Issues

Q4. Lessons Learned



1 - Basics



2 - Visual Learning



3 - My Digital Life



4 - Suite Tools



5 - Digital Footprint



6 - Cyber Safety



7 - Be Legal & Fair



8 - Troubleshooting



9 - Search Strategies



10 - Digital Images



11 - Powerful Presentations



12 - Interactives



13 - Dig the Data



14 - Social Networking



15 - Design Thinking



16 - Career Prep



17 - Creative Communications



18 - Digital Storytelling



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20 - Global Collaboration



21 - Computational Thinking

Teaching Resources

TEACHERS

Teacher Start Page

Teacher Registration

Teacher Guides

Accommodations

Assessment

Competencies & Standards

Digital Citizenship

Feedback & Evaluation

Presentations to Share

Teacher Resource Login

Updates

Standards Alignment Document

Assessment Bank

Complete URL listing

Goals of 21things4students



About Things, Quests, and Roadmap



Teacher Handbook, Lesson Guides, Listserv, and Syllabus



Student Checklists



Quizzes (Quizlet and ProProfs)



BADGES AND CERTIFICATES

- Teachers have access to digital badges and award certificates to provide as students complete the 'things'



CREATE

...COLLABORATE...COMMUNICATE

- CREATE your own digital portfolio of projects to showcase your work and skills (blog, web site, online collection...)
- COLLABORATE locally and globally
- COMMUNICATE with your parents/guardians, siblings, family members, friends, neighbors to help teach them what you learn



Explore
and Enjoy

You are very important



- To help keep this current, fun, and up-to-date
- Email: When a link or content goes bad
- Complete the End of 'Thing' surveys with feedback and suggestions located on the "graduation pages"

SPECIAL THANKS TO

- The Original 21things Project creation team: Melissa White and Carolyn McCarthy, and original partners: Jennifer Parker and Jan Harding.
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- 21t4students Advisory Team of educators from across Michigan
- Teams of Revision teachers from across the state of Michigan helping keep the content current, revised and fresh each year.
- Students that have provided feedback and suggestions (over 4,000 per year).
- Special mention: Daryl McLeese, PawPaw Michigan teacher for the animated video introductions (and his student voices), Del Pike, Kathryn Grunow, Courtney Conley, Robin Pegg, Julia Lengemann, and many others that have helped this project.

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