Y6 Mathematical Digital Scavenger Hunt

Overview
For Year 6 Mathematics Day, students will . . .

Jobs For Presenter

1. Play the music for Clue 9 That's Mathematics
2. Show the image for Clue 10 MC Escher's Circle Limit III

Clues
The clues are as follows:

1. ***URL + Instructions*** – participants use this to get started. It gives them a web address they need to complete using the other clues: http://bit.ly/1d183rC
2. ***Text Search*** – participants who do not know binary will need to search to find the answer: the only two numbers in binary are 0 and 1, so the answer is 1.
3. ***Google Chrome logo*** - participants need to use Chrome.
4. ***Shazam*** – participants will need to look at Shazam and determine how to use it.
5. ***QR Code*** - participants scan the QR code to find a 12 sided polygon drawn in Scratch. They then need to search to find it is a dodecagon. The clue is the first letter, small case
6. ***Google Maps / Text Search*** - participants will zoom to the Museum of Mathematics in NY. They will need to search for the Museum Site to determine it is closed 1 day a year.
7. ***Text Search***– Order of Operations - 5 x 8 + 6 ÷ 6 - 12 x 2 = 17 1+7= 8
8. ***Text Search*** - Participants will need to look up palindrome. 8 3 5 2 5 3 8
9. ***Music Search*** – presenter to play That's Mathematics by Tom Lehrer , with participants to use Shazam (downloaded earlier) to identify it and find out the fourth letter in the singer's surname (which is r).
10. ***Image Search*** – presenter to put MC Escher's Circle Limit III on the board. Participants need to take a photo of the image, and search for it online, finding the last letter of the painter's middle name (C)

Help!
Students receive three Help! cards which they can cash in for further clues or assistance from the teacher:

1. ***Public Open Question*** - students can ask an open-ended question, but answer is shared with all teams.
2. ***Private Open Question*** - students can ask an open-ended question, and the answer is told only to them.
3. ***Private Yes/No Question*** - students can ask a yes/no question, and the answer is told only to them.

Skills Involved

- **Link Shortening** - use bit.ly, goo.gl or tinyurl.com to turn long links into short links. This is useful when people need to write down a link.
- **Text Search** - simply using Google's web search functionality to answer a question, such as "second digit used in binary counting systems".
- **Image Search** - drag and drop an image into images.google.com to search for images based on an image, rather than on text. Very useful for identifying logos, art

work, etc. Google Goggles is an Android app that does this, but not as well as the web site. Does not work well with Safari (this is a great teachable moment about browser foibles)

- **QR Codes** - create codes with links, pictures, text, etc, using a QR code generator (I like http://www.qrstuff.com, but there are tonnes). Scan codes using a mobile phone with appropriate scanning app (I like QRDroid for Android), or using a website such as webqr.com (as long as it is not blocked, only works with Chrome).
- **Google Maps** - get students to step out of the classroom into a real life setting and look for clues. Make sure you test it ahead of time to make sure things have not changed if the Google car has been around and updated the area.
- **Music Search** - use Shazam or SoundHound on a phone or desktop to identify a piece of music, and then search online for a lyric or piece of band trivia.
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Printable Materials

The following two pages contain materials which can be printed and used to run the game.

License

Printable Clues

Clue 1

Take the answer from every blue clue card, and add them, in order, to this address.

http://bit.ly/ _ _ _ _ _ _ _

Once correct, it will take you to a congratulatory message.

Clue 2

The second digit used in binary counting systems.

Clue 3

Clue 4

On the iPod, find out what this app does. You will need it later.

Clue 5

http://goo.gl/CsWGMU

First letter of the name, lower case.

Clue 6

Zoom into find a mathematical location. How many days a year is the location closed?

Clue 7

Use Order of Operations to solve

5 x 8 + 6 ÷ 6 - 12 x 2 =

Add the two digits in your answer together.

Clue 8

This number is a palindrome. What will the sixth number be?

8 3 5 2 _ _ _

Clue 9	Clue 10
Sometime during this session you will hear music. Use an iPod app to identify it and find out the fourth letter in the lead singer's surname.	Sometime during this session an image will appear on the board: use a camera to capture the image, search for it. What is this mathematical artist's middle initial? (Or wait for for an announcement about an alternative digital delivery)

Printable Help! Cards

Help! We Are Stuck Entitles bearer to one *Public Open Question*	Help! We Are Stuck Entitles bearer to one Private Open Question
Help! We Are Stuck Entitles bearer to one *Private Yes/No Question*	