Working on your own? Follow these steps!

1. Work on these calculations by hand.

   Your final answer will tell you your age on Mars.

2. Open a web browser (Google Chrome, Microsoft Edge, Safari are all workable platforms!) and type up a script

   Your final answer should match with the answer from Step 1!

1

Step 1: By Hand…

- Grab a paper and pencil!
- Write down your age (for example: 30 Earth years)
- Multiply your age by 365.25 to get your age in Earth days

  30 x 365.25 = 10,957.5 Earth days
- Divide this number by 1.027 to get your age in Mars days

  10,957.5 / 1.027 = 10,669.425 Mars days (round to three decimal places)
- Divide this number by 668.599 to get your age in Martian years

  10,669.425 / 668.599 = ~15 Mars years (round to nearest whole number)

2

Step 2: Programming…

- Open your favourite Web browser and hit the F12 key. Select the Console tab. (Check the next sections of this document for complete instructions to access and open the Console window).
- Type the following script (be sure to use your age for Earth Years)
- Create a new variable that records your age in Earth Years.

```
earthAgeInYears = 30;
```

- Hit Enter to move to the next line. Note that the program has remembered your newly created variable and the number assigned to it.
- Create a new variable (earthAgeInDays) that uses the variable in the previous line, multiply it by 365.25 to get your age in Earth days. Note: you now have two unique variables that the program can remember.

```
earthAgeInDays = earthAgeInYears * 365.25;
```

- Create a new variable (marsAgeInDays) that will translate the earthday age into an age that is in Mars days. This is possible by dividing the above variable by 1.027. Note: you now have three unique variables that the program can remember.

```
marsAgeInDays = earthAgeInDays / 1.027;
```

3

- Convert your age to Martian years and remove the numbers after the decimal point. Math.trunc() is a JavaScript function that will remove digits after the decimal point in the number.

Create a final new variable (marsAgeinYears) that will take the Mars age in Days and convert it into years using the Math.trunc () function. This is possible by dividing the number by 668.599. Note: you now have four unique variables that the program remembers.

```
marsAgeInYears = Math.trunc (marsAgeInDays / 668.599);
```

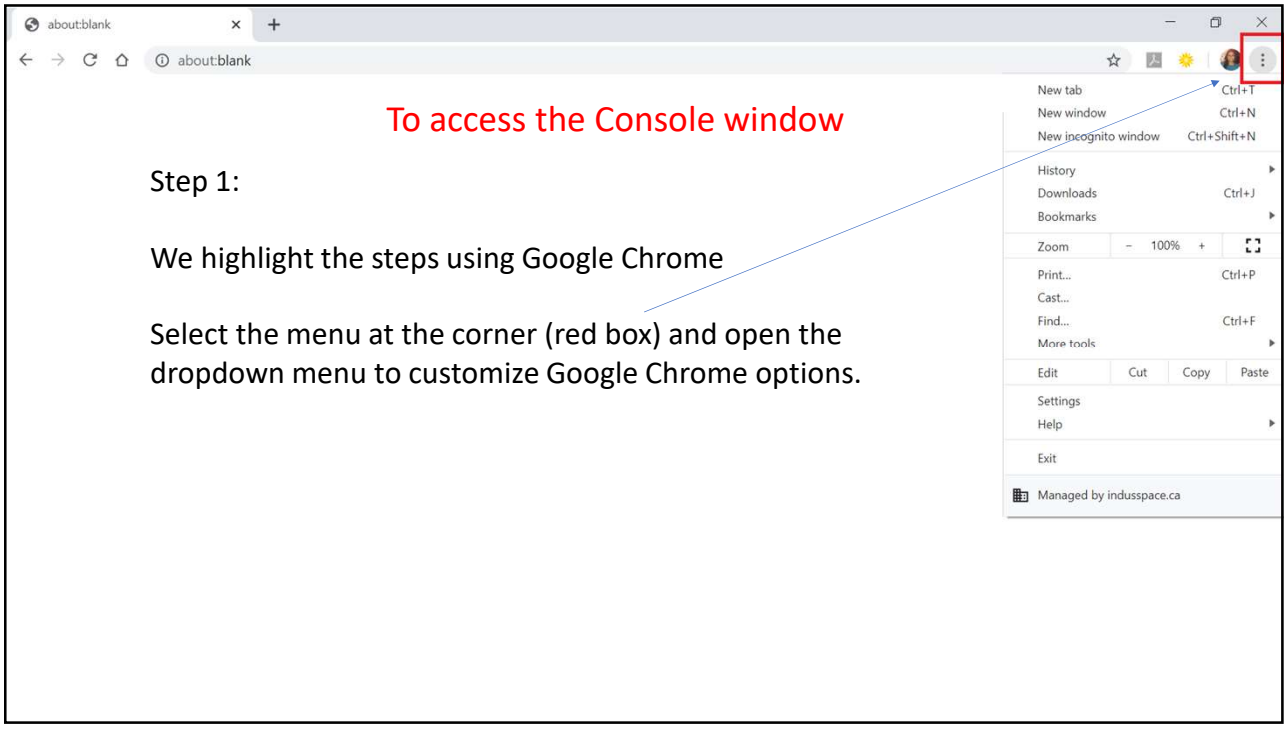
4

- Finally you are going to print your age in the console. The Console.log() prints messages to the console. Once you run this part of the script you should see a message appear that tells you your age on Mars, rounded up to a whole number.

```
console.log('Your age on Mars is about ' + marsAgeInYears + ' years old.');
```

Your age on Mars is about 15 years old.

5



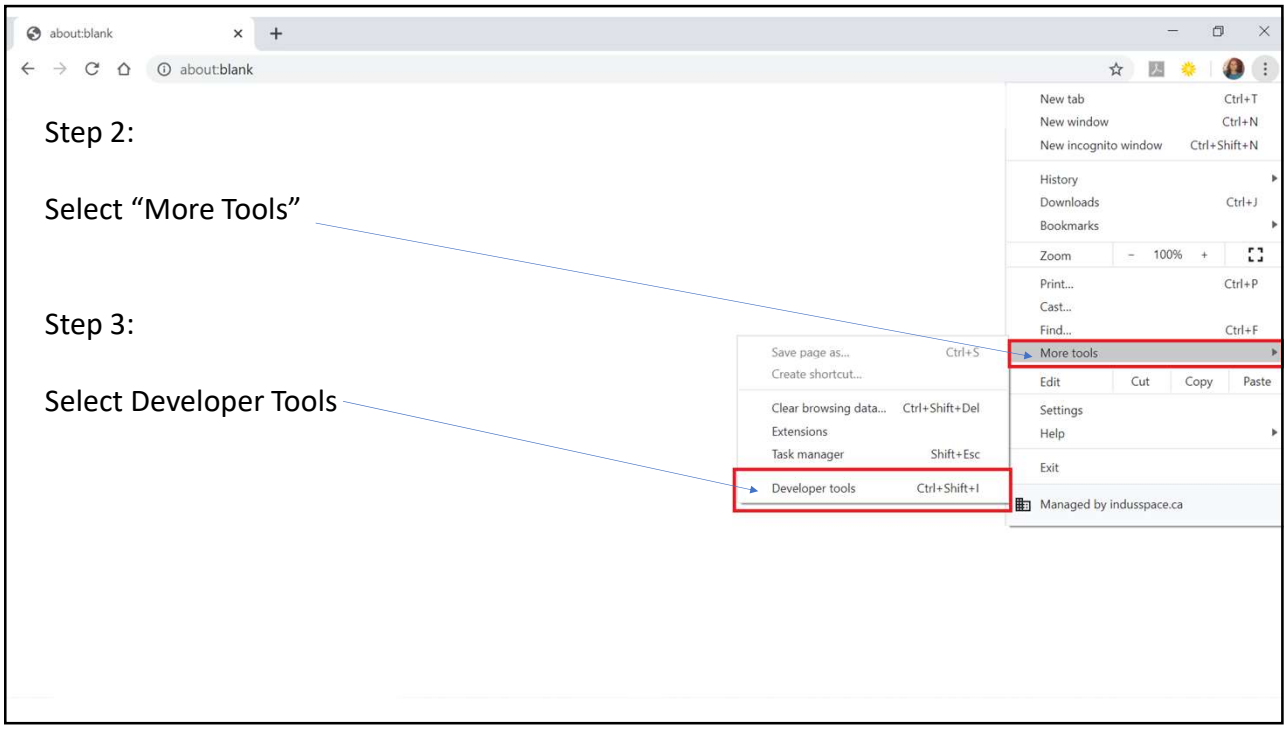
To access the Console window

Step 1:

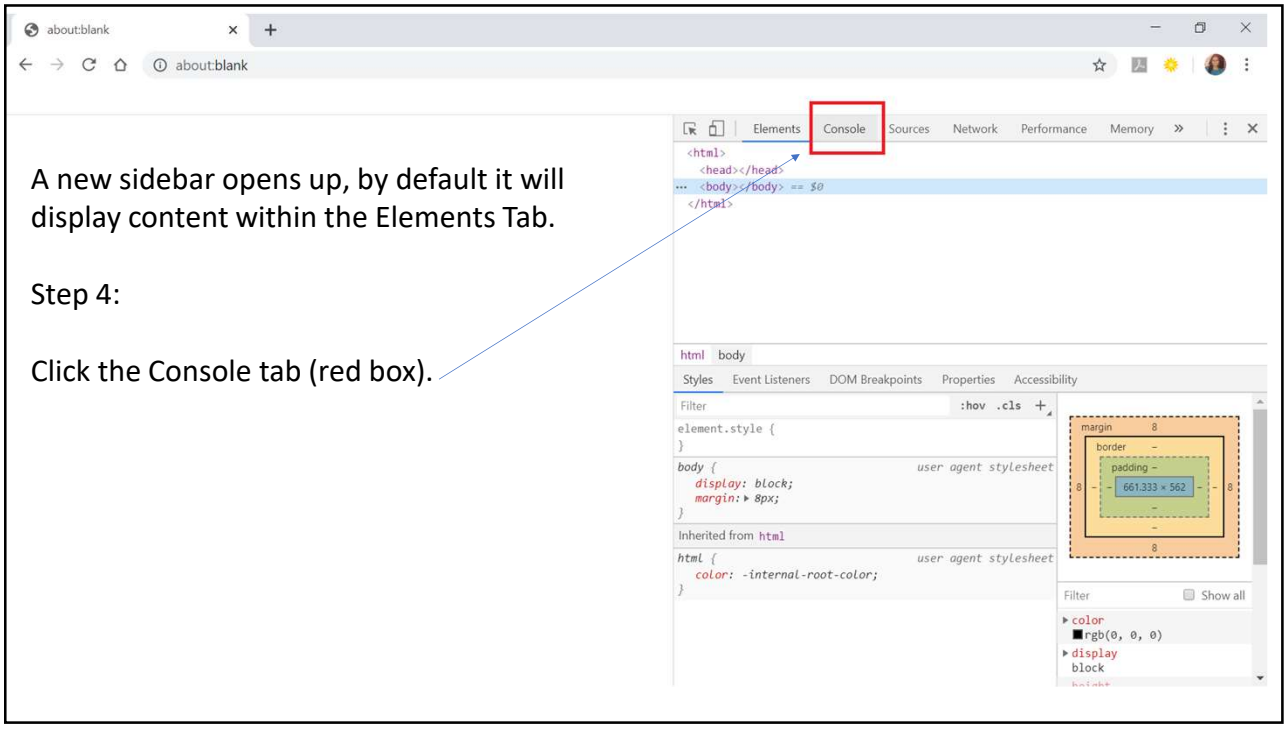
We highlight the steps using Google Chrome

Select the menu at the corner (red box) and open the dropdown menu to customize Google Chrome options.

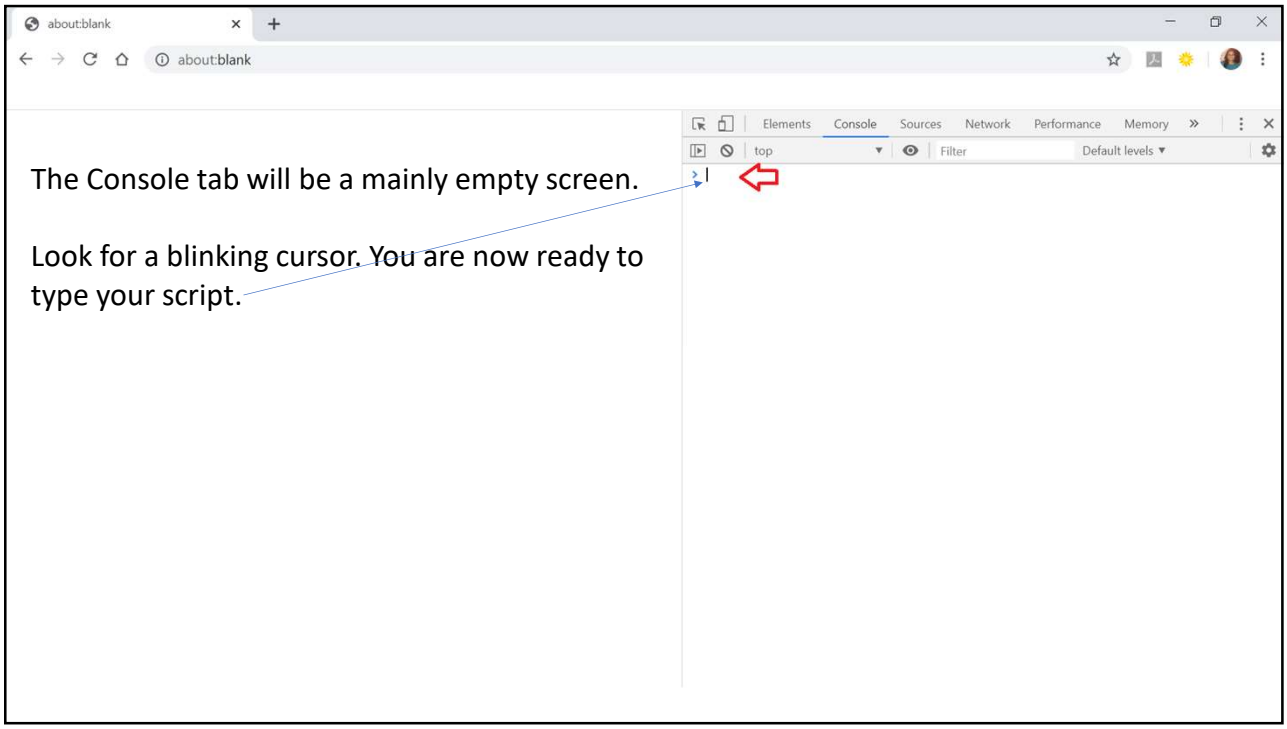
6


about:blank
about:blank
Step 2:
Select “More Tools”
Step 3:
Select Developer Tools
New tab Ctrl+T
New window Ctrl+N
New incognito window Ctrl+Shift+N
History
Downloads Ctrl+J
Bookmarks
Zoom - 100% +
Print... Ctrl+P
Cast...
Find... Ctrl+F
More tools
Edit Cut Copy Paste
Settings
Help
Exit
Managed by indusspace.ca
Save page as... Ctrl+S
Create shortcut...
Clear browsing data... Ctrl+Shift+Del
Extensions
Task manager Shift+Esc
Developer tools Ctrl+Shift+I

7


about:blank
about:blank
A new sidebar opens up, by default it will display content within the Elements Tab.
Step 4:
Click the Console tab (red box).
Elements
Console
Sources
Network
Performance
Memory
<html>
<head></head>
<body></body> == $0
</html>
html body
Styles
Event Listeners
DOM Breakpoints
Properties
Accessibility
Filter
:hov .cls +
element.style {
}
body {
display: block;
margin: 8px;
}
user agent stylesheet
Inherited from html
html {
color: -internal-root-color;
}
user agent stylesheet
margin 8
border -
padding -
661.333 × 562
Filter
Show all
color
rgb(0, 0, 0)
display
block

8


about:blank
about:blank
Elements
Console
Sources
Network
Performance
Memory
top
Filter
Default levels
The Console tab will be a mainly empty screen.
Look for a blinking cursor. You are now ready to type your script.

9