Your research should.....

- Be accurate
  - > Does it make sense? Do other sources say the same thing?
- Be put into your own words
  - > It's not going to be good research if you are just writing notes "word-for-word".
  - > Make it your own so that you can understand it and use it in your script.
- Give you information to write your script!

Your research should.....

- Have a list of where you found your information. This is called "citing sources".
  - > It means that you have to write down:
    - – What is it? (website, book, newspaper article, etc)
    - – The title.
    - – Who wrote it. If you're not sure, it can be "Author Unknown"
    - – Example:
      - « Green Eggs and Ham by Dr. Seuss. Book.
      - « https://en.wikipedia.org/wiki/Viola_Desmond. Author Unknown . Website.

Your research should.....

- Most importantly, your research should give you facts and information to help you write your script for your podcast.
- You may already have a great idea for your podcast. But right now, you need to know more about your topic so that you know what you want to share. Without information, you cannot do a successful project!

Good research is based on A PLAN!

- We know that all of you are excited and want to just start researching. BUT, before you jump into researching, you need to have a plan and know what you are looking for!
- Think like a journalist/podcaster! What are the important facts? What do you really, really want to share? How can you make sure that someone who listens to your podcast will not only be entertained, but will also KNOW MORE about your topic?

Step 1: Choose Topic

Step 2: Research Topic

Step 3: Get Feedback on Research

Step 3: Write Script

Step 4: Have Script Reviewed

Step 5: Record Your Script

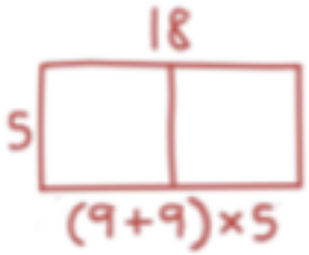
(Possible Extra Steps...)

Step 6: Add Music

Step 7: Add Sound Effects

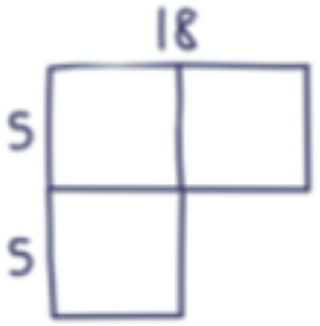
18 x 5

Neil



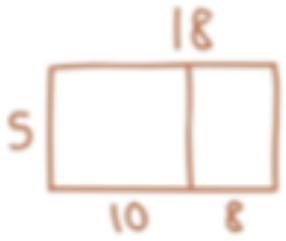
45+45=90

Ricardo



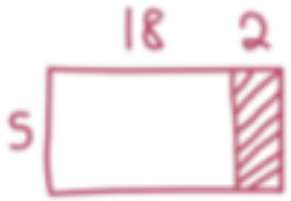
18×5=9×10

Sammi



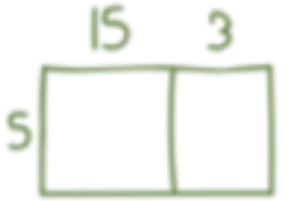
(10×5)+(8×5)
50+40=90

Jaime



20×5=100
2×5=10
100−10=90

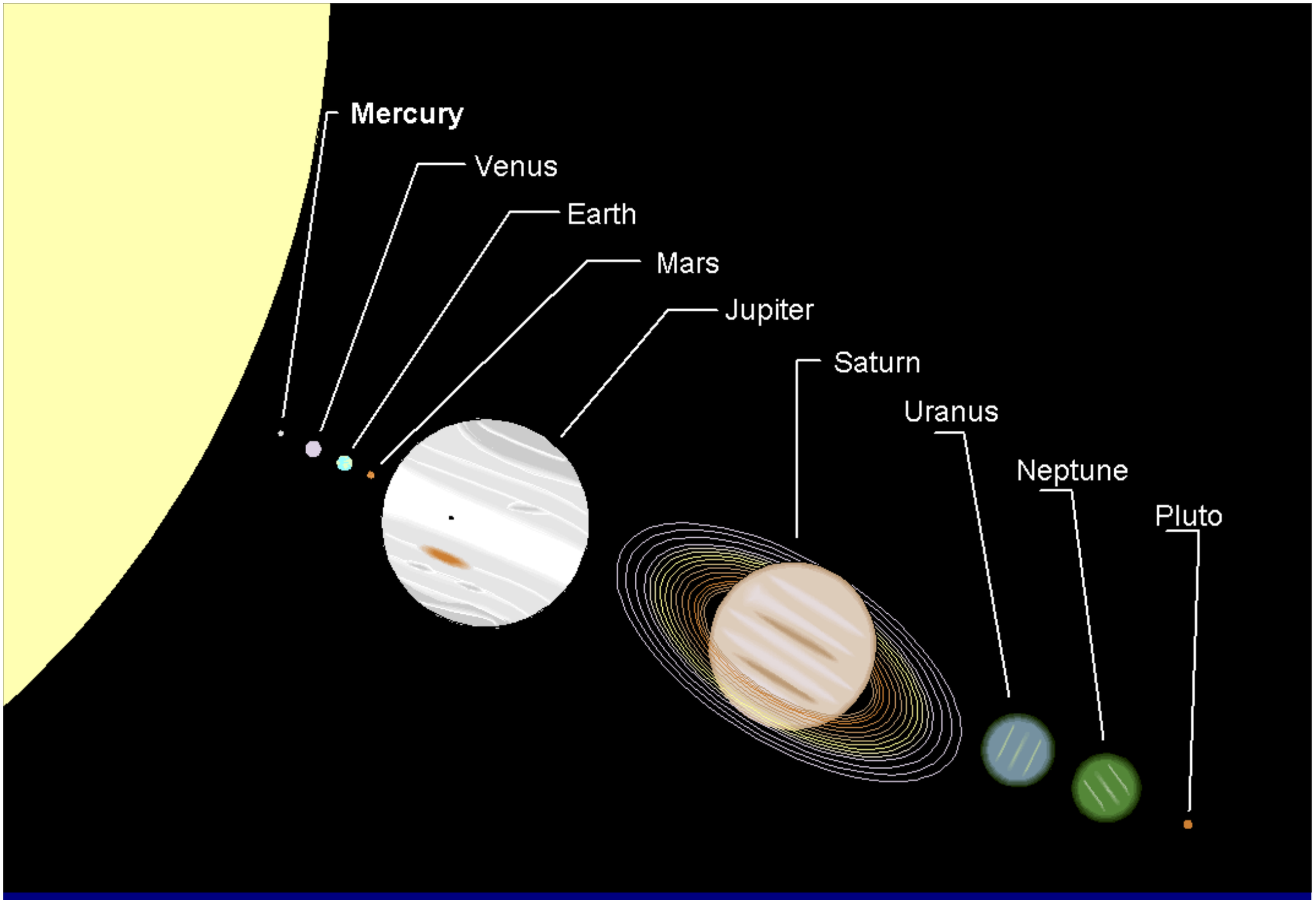
Ariane



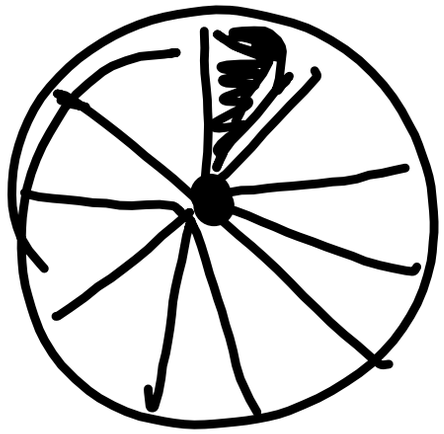
15×5=75
3×5=15
75+15=90

Bryan

(18×2)+(18×2)+18
36+36+18=90

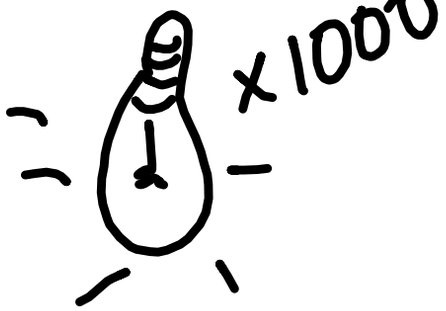

Mercury
Venus
Earth
Mars
Jupiter
Saturn
Uranus
Neptune
Pluto

TRAPPIST-1 Dwarf Star is:



- one tenth the mass of our sun
- one thousandth as bright as our sun

$\frac{1}{1000}$

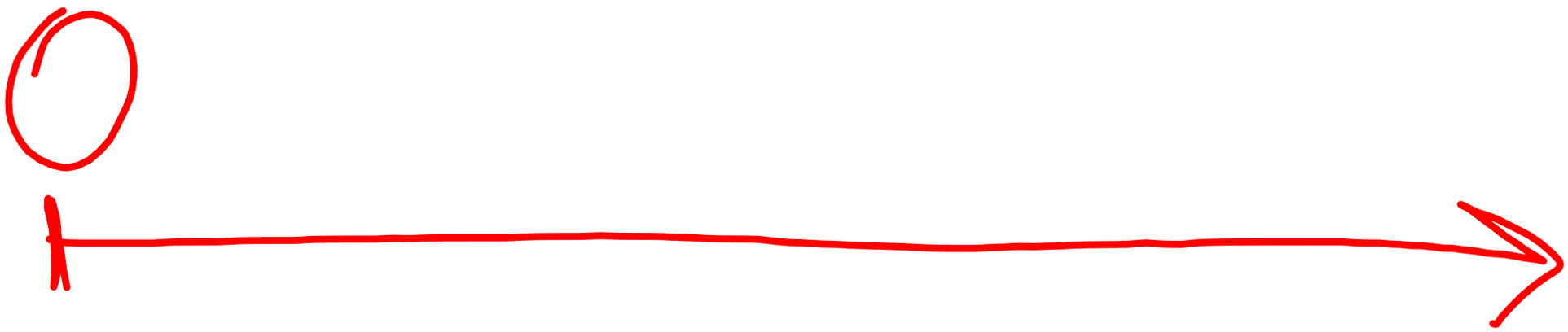


Putting Fractions in Order

Split into 2 groups

order yourselves from

Least to Greatest

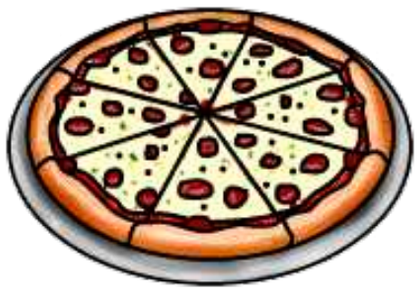


How many pieces?

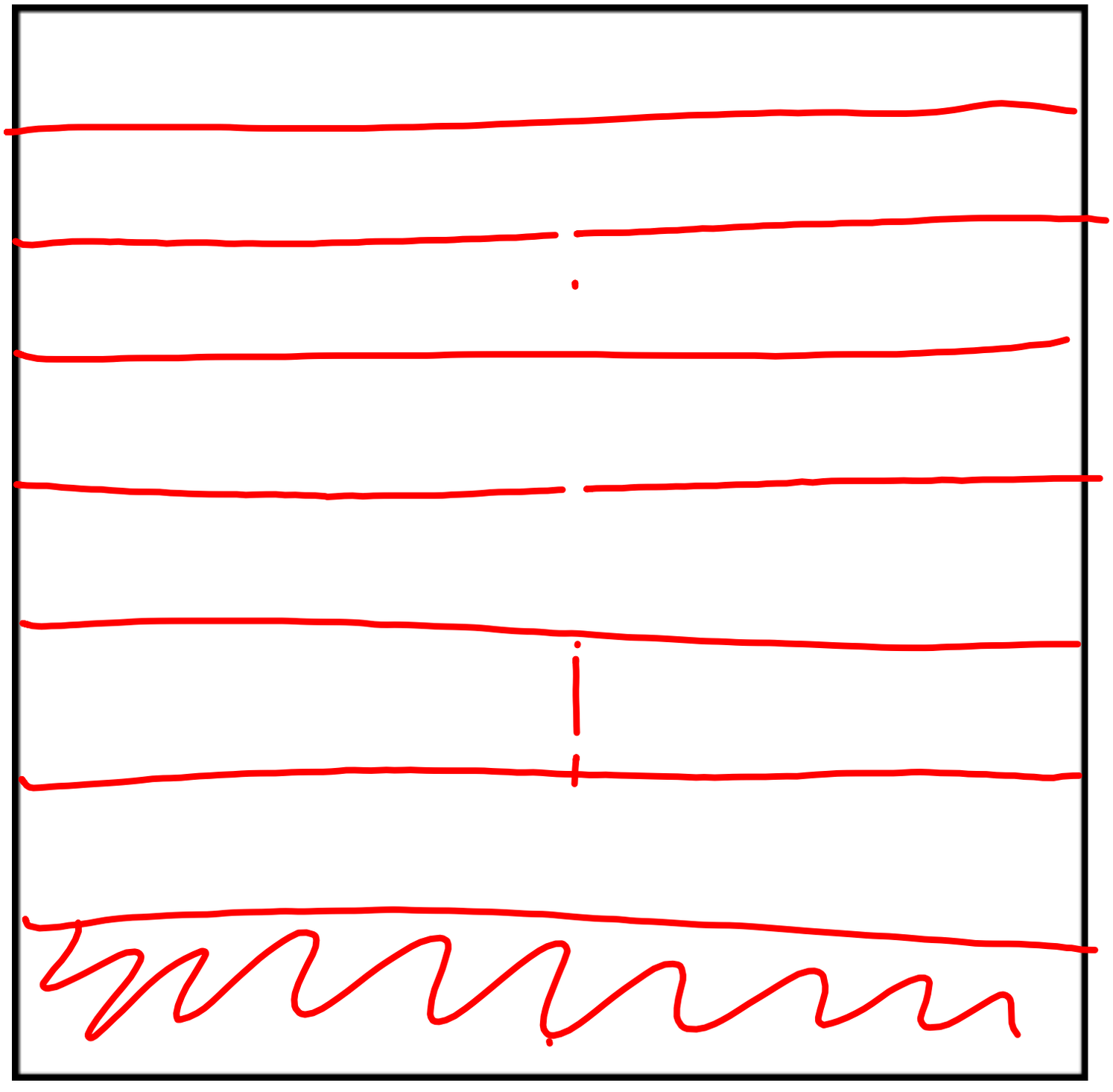
Sixths

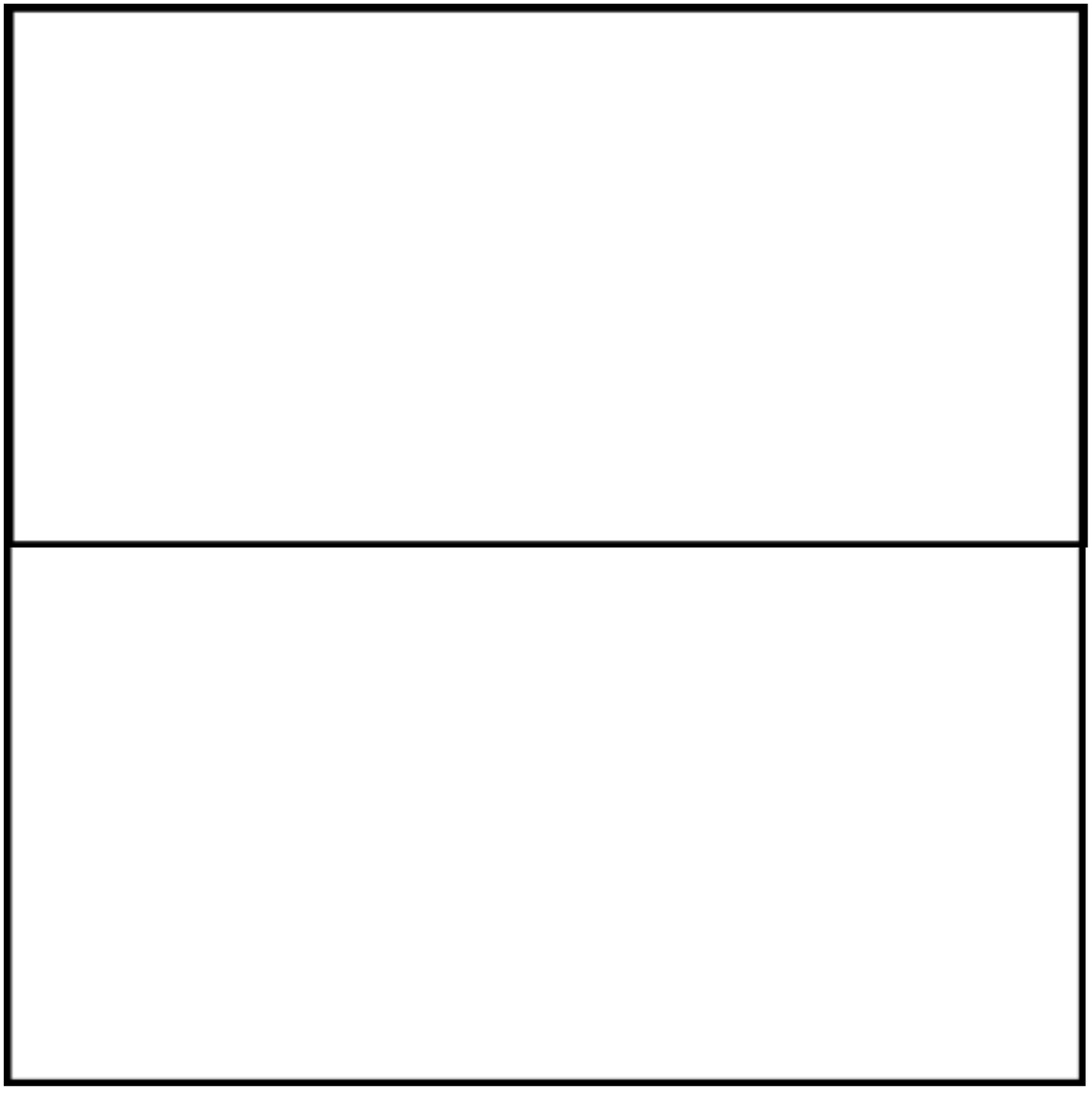
$\frac{6}{6}$

eighths



$\frac{8}{8}$





fifths

Symbolically = Numbers

$\frac{1}{4}$

Pictorially - Draw using pictures...

$\frac{4}{8}$

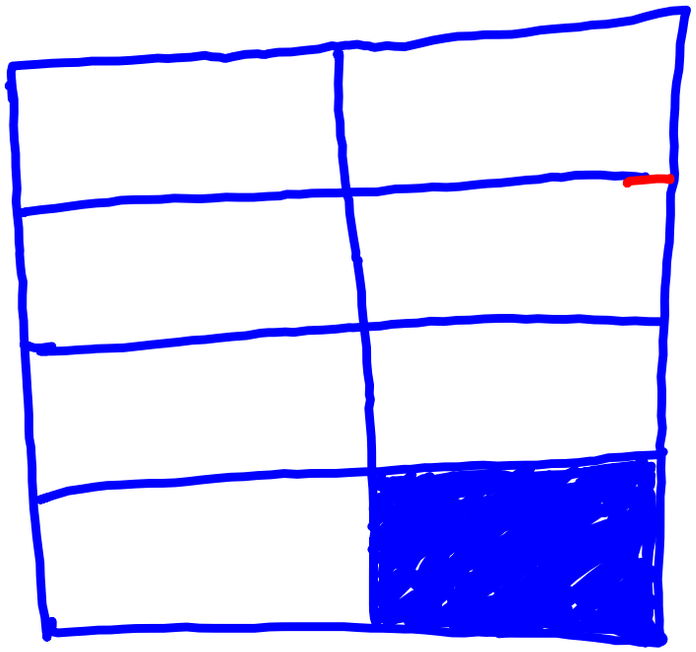
Your fraction $>$ than 1 whole

$\frac{1}{8}$

Your fraction $<$ than 1 whole

$\frac{7}{4}$

$\frac{1}{8}$ - numerator
$\frac{1}{8}$ - denominator

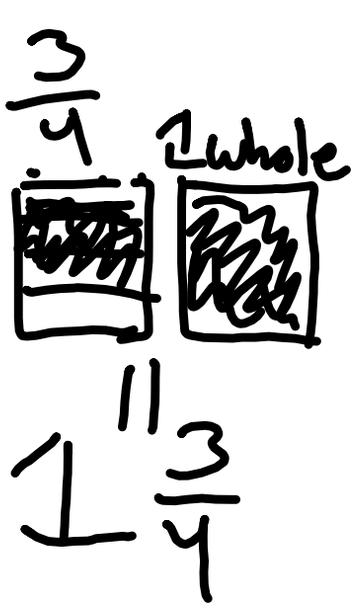


$\frac{1}{8}$

$\frac{7}{4}$

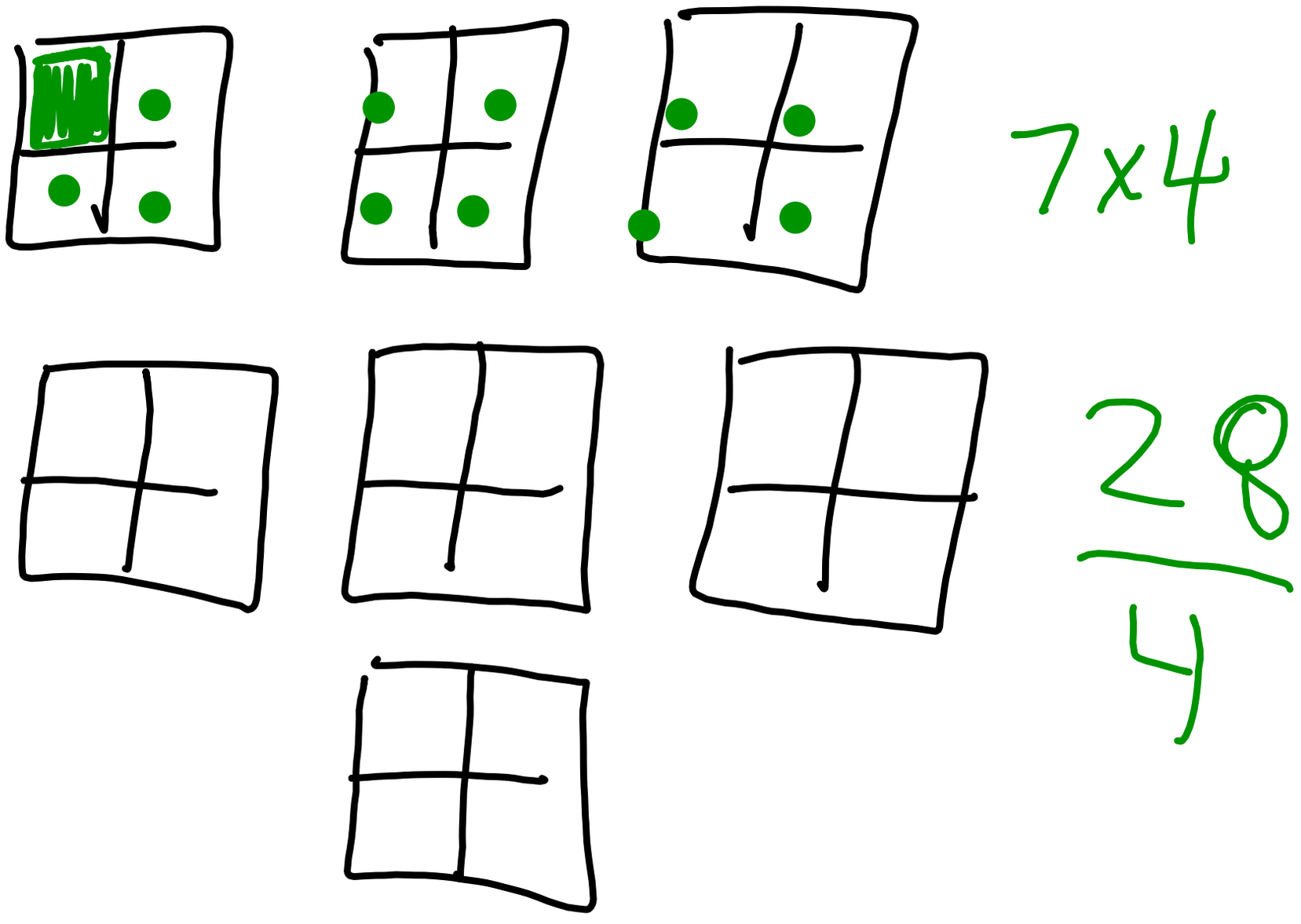
$\frac{7}{4} \rightarrow 4-7=3$

$\frac{7}{4} = 1\frac{3}{4}$



$1\frac{3}{4}$

$\frac{7}{4}$ = improper Fraction



7x4

28

4

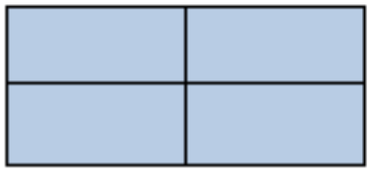
The TRAPPIST-1 dwarf star is one-ninth the age of our sun.

TRAPPIST-1 Dwarf Star is

500 000 000 years old

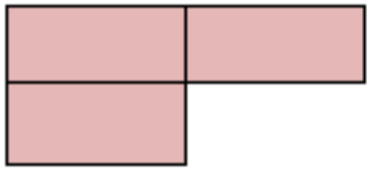
Estimate how old our sun is?

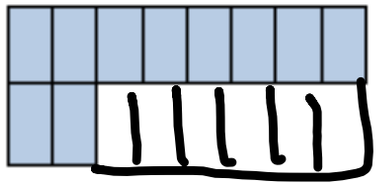
Looking at the fraction pieces below. The fraction in the top left is one whole. Compare each visual to the whole and identify the fraction for each of the other visuals.



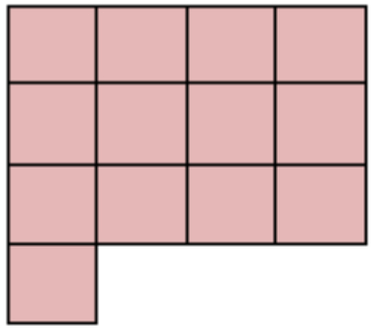
1 whole $\frac{1}{1}$ or $\frac{4}{4}$

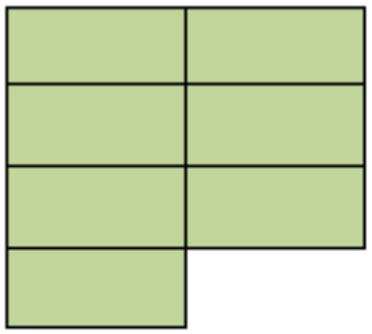
$\frac{1}{4}$ $\frac{2}{8}$

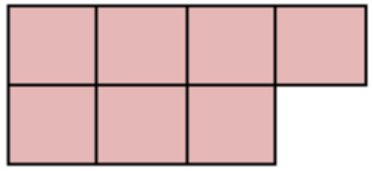


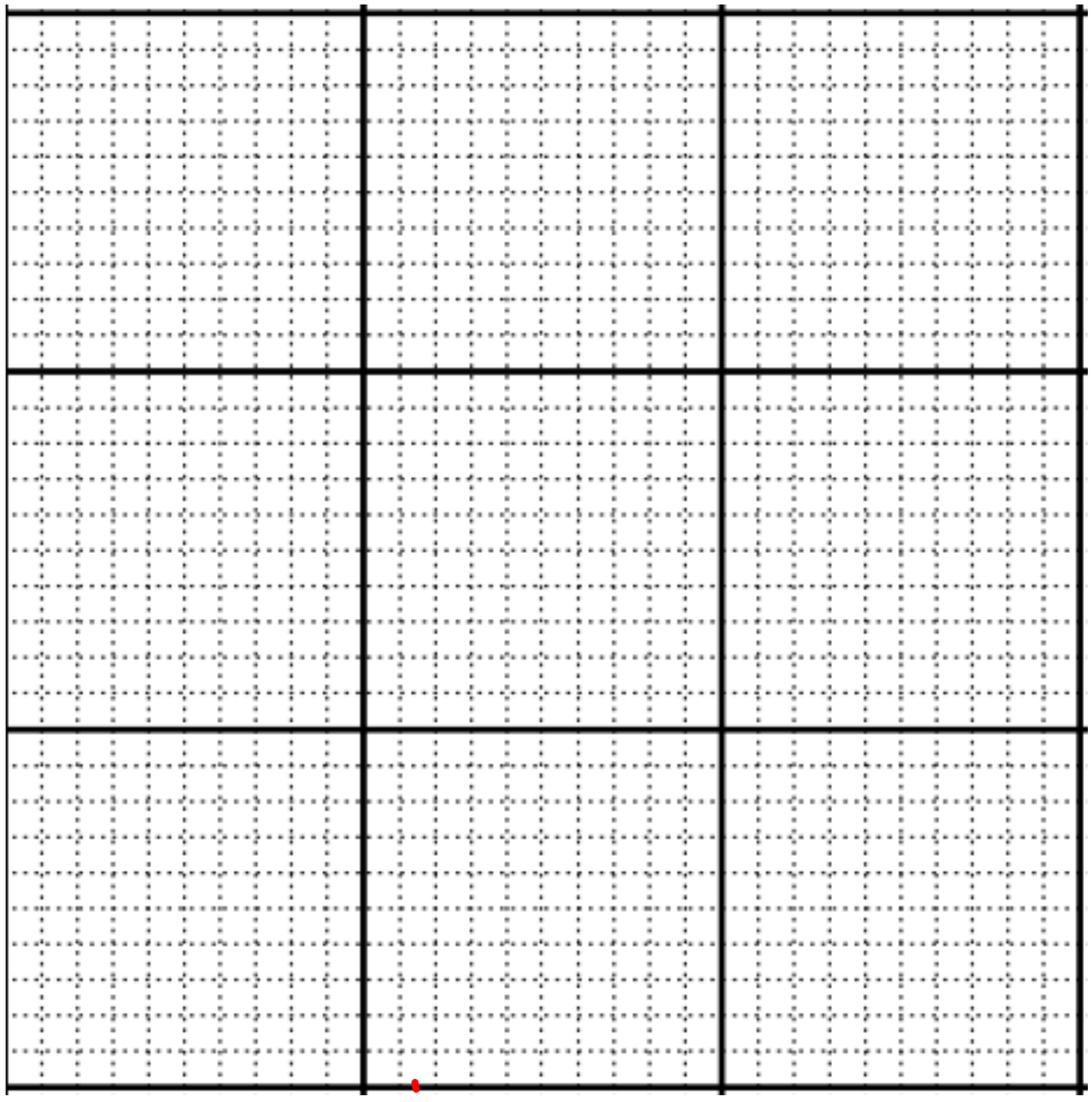


$\frac{10}{16}$ $\frac{20}{32}$









Close Read

Trappist -1 Article

NASA has discovered 7 Earth-like planets… Article Glossary

Vocabulary Word	**Defintion**
TRAPPIST-1 System	A solar system different than ours, 40 light years away. It has 7 planets that rotate around the dwarf star (sun) smaller than our solar system and the planets are closer together
Habitable	Suitable or good enough to live in
Composition	The way in which a whole or mixture is made up.
Atmosphere	The envelope of gases surrounding earth or another planet. The Earth's atmosphere consists of: nitrogen, oxygen and argon
Astronomer	A scientist in the field of astronomy. They study on a question outside of earh. They study stars, planets, moons, comets, galaxies…
Exoplanet	A planet that orbits a star outside our solar system
Dwarf Star	A relatively small star with low luminosity (total amount of energy emitted, measured in joules or watts)

Title of Article:
Fill out the 5 W's and H **Who:** **What:** **Where:** **When:** **Why:** **How:**
Summary: Write a summary of what you have read in 40 words or less

Scene 1- Press Conference

Nasa: Zach and Alex Astronauts: Brandon Sarah Elizabeth Paige Kate

Media Scrum Press – everyone else

Reporter- Mike

Zach: Welcome ladies and gentlemen to the our press conference for a special day as we announce a voyage into the future

Alex: We have time to take a few questions before we launch.

Mike: How long will this trip to the TRAPPIST-1 system take?

Zach: Back in 2017 using our Horizone shuttle, it would have taken 800 000 years. (Awwww..)
Now with our new technology, travelling just under light speed it will take 50 years to arrive on TRAAPIST-1 (Wheeeeee)

Mike: The question on all of our minds is, why do you want to travel to this star system?

Alex: Because we are loosing (depleting) resources on our own planet, (Awwwwww) and there might be resources that we need on the TRAPPIST-1 habitable planets (Ohhhhhhh)

Mike: How are you going to fuel such a long journey?

Zach: We will be using micro waves from space that bounce around in a chamber and turn into energy to power our ship which we call the Titanium Beast. (Applause)

Alex: Using this high quality titanium foil we can protect our ship from potential dangers

Mike: I just want to say on behalf of the world good luck.

Media Scrum participants exit front of stage to the wings
Astronauts move to centre stage Jamie enters stage left

Scene 2 – Handing Keys to Astronauts

Jamie holds up a set of keys

Jamie: These are the keys for the Titanium Beast Shuttle

Astronauts lunge towards the keys
Jamie pull back (Ahhhh)

Jamie: She's brand new, so you better bring it back in one piece"

Astronauts lunge towards the keys
Jamie Pull back (Ahhhhh)
Jamie: Be careful, watch out for meteorites, take of your shoes inside, don't forget your toothbrush and don't eat off the dashboard, Got it?

Astronauts take keys and walk towards green line counting 10-9-8-7-6
Everyone else walks from the wings to centre back stage and counts 5-4-3-2-1

" We are going on a trip
in our favorite rocket ship
Zooming through the sky
Titanium Beast
Climb aboard get ready to explore
There's so much to find on
TRAPPIST-1"

Singers exit stage to the wings
Astronauts leave stage right and grab the shuttle

Scene 3- Space Voyage

Planets emerge from the wings
Georgie (Mars) Red
Emily (Jupiter) Orange/White/ Red spot
Ruby (Saturn) Pale Yellow
Olivia (Uranus)light blue
Chloe (Neptune) Blue and White
Brad (Pouty Pluto) grey

Georgie: I am messy Mars. I have the biggest sandstorms in the solar system

Emily: I am Jealous Jupiter and my red spot is three times the size of earth and is one of the most violent storms in the galaxy.

Ruby: I am Sassy Saturn. I am the sixth planet from the sun and my trip around the sun is 30 earth years and I rain diamonds

Olivia: I am Unsure Uranus my temperatures get down to -224 degrees Celsius and I am at a 97 degree angle

Chloe: I am Negative Neptune. I take 164.8 earth years to orbit the sun. I heard the h planet on TAPPIST-1 only takes 20 earth days to orbit it's dwarf star.
How nice for planet h planet

Brad: I am Pouty Pluto and I'm not a real planet
All Planets: Why aren't you a real planet?
Brad: I am just too small
Everyone: Awwwwww….

Shuttle moves off stage
Planets pirouette off stage (opposite direction of shuttle)

Scene 4 – First Contact

(*Space music plays*)

Ms. McNeil: what are these strange alien life **(duck voice)**

Aliens: The planets in Trappist 1 have permanent light sides and dark sides. This sounds fun, but as one side freezes the other burns.

Aliens: our dwarf star is .1% as bright as your sun.

Aliens: All of the planets in our system take less then 3 weeks to orbit the dwarf star.

Et touch- brake out in dance. (everyone)