

Galactic Kiwi! – Level 3 Cloze activity. Name _____

| | | | | | | |
|----------|----------|----------|-----------|--------------|--------|-----------|
| middle | moonless | attached | telescope | sky | mirror | Milky Way |
| ordinary | system | contain | millions | calculations | Galaxy | cloud |

Have you ever gazed up into the _____ on perfectly clear night out in the country? If you have, you might have noticed something peculiar; a long puffy _____ that isn't a cloud. You can also see thousands of stars, but what is that strange band of faintly glowing candy floss? You are actually seeing some of our own _____ called the 'Milky Way'. The "cloud" is made of countless _____ of stars, a very long way away, that appear to be close together.

The Milky Way is a spiral galaxy, thought to be over 100 thousand light-years across and to _____ between 100 and 400 billion stars! Each one of those stars could have its own solar _____ with as many planets as our own. Our solar system is a relatively _____ one, located on the inner side of one the galaxy's spiral arms called 'Orion' – a long way from the _____ or 'galactic core'. This is a good thing, because the centre of the Milky Way galaxy might be a super massive black hole! (A black hole is a collapsed star that has imploded so much that not even light can escape its mega-strong gravitational pull).

Much of what we think about the _____ is based on amazing mathematical _____ and what we can see from our little corner. We can't actually see what our own galaxy looks like -much like you can't see the back of your own head without a _____.

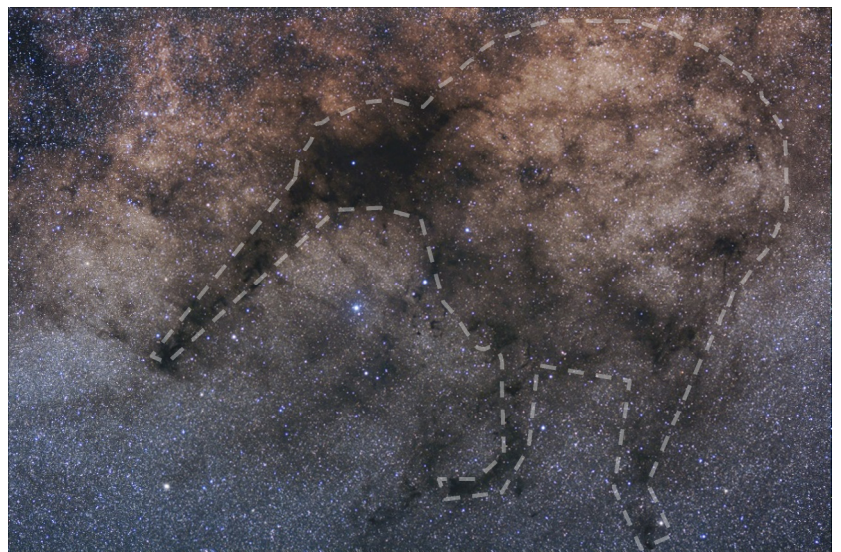


Photo: 'Galactic Kiwi'

Jonathan Green 2014

What we can see however, is incredibly interesting. There are stars so big our whole solar system would fit inside. There is a nebula (area of gas and other material) in the shape of a human eye! There are some stars so close together that they orbit each other (binary stars). One of the strangest things you can find is a cluster of stars that form the easily recognisable shape of a kiwi bird! It can only be seen through a _____, but it can be seen from New Zealand. Local Astro-photographer Jonathan Green took the photo on this page using an ordinary camera _____ to a telescope especially designed to track astronomical features.

So, next time you find yourself away from the city lights, on a _____ and clear night – look up. See if you can 'drink in' the Milky Way!

Dave Moran 2015

Galactic Kiwi! - Comprehension:

(you are allowed to re-read the story)

1. What is the name for the galaxy we live in? _____
2. What is the best time and place to see the Milky Way?

3. Roughly how many stars do astronomers guess are in the Milky Way?

4. How would you describe a 'black hole' in space? (Something simple will do – no need to call Stephen Hawking) _____

5. There are photographs of the whole galaxy from space. True / False
6. Name 2 cool things you can find in our galaxy:

7. How do you think the Milky Way got its name?

8. Higher level thinking: Astronomers have to take an 'educated guess' about most astronomical numbers. How do you think they might have estimated the number of stars in our galaxy?

Extra for experts: Do an internet search for 'our place in the Universe' (try YouTube too)

More random facts:

- The Milky Way is not the only or even largest galaxy we know of. In fact it is just one of hundreds just in the local cluster of galaxies, some of which are thousands of times bigger!
- There are probably more stars in the Universe than there are grains of sand on all of Earth. However there are more atoms in a single grain of sand than there are stars in the Universe. (Mind: blown!)

Read more: <http://www.universetoday.com/22285/facts-about-the-milky-way/>

Galactic Kiwi! – Level 3 Cloze activity. **Answers**

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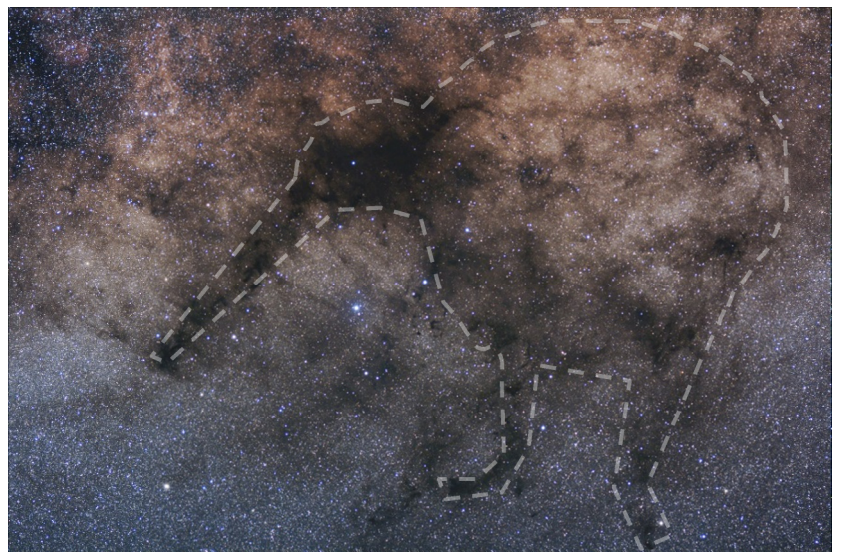


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