LESSON TITLE: HALFWAY TO WHERE?		
T:1 WK:1 SUBJ: Geog	GR: 5	LESSON 1 OF 8

Lesson Objectives:

- Understand and work with a range of sources
- Communicate ideas and information
- Develop practical intelligence
- Question accepted practices

Resources:

- Video1: Alien exploration Lesson 1
- RES1: Gore map from the equator
- RES2: Gore map from Poles
- WS1: Compare the globe and the map
- Video2: Ted-Ed: Why every world map is wrong: Kayla Wolf: 2021

Equipment:

- Globe
- Printed maps/ atlas

LESSON OUTLINE

Question hook: **Why is it difficult to represent the Earth on a flat map?**

1. Begin the lesson with the question hook. Encourage learners to think about curved surfaces and how they could be distorted when flattened.
2. Video1: Introduce the three aliens. They are exploring the universe trying to find a good rest stop to refuel on their journeys. The aliens may need minerals, water, plant matter, etc. to replenish their stocks.
3. RES1&2: Learners now investigate the challenges of flattening a curved surface. These two maps are gore maps and can be constructed into a globe (one has the Equator as the central point while the other has the Poles as the central point). The learners are challenged to choose one of the gore maps and to try and draw it onto a blank sheet as a flattened map with no blank spaces between the pieces of the gore map. They will discover that some continents and oceans inevitably become distorted. Encourage them to discuss their findings. Learners compare the distortions of the maps. Which "flattening method" gives the fairest representation of the globe?
4. WS1: (ZedTech)Learners compare the globe and the flat map summarising as many similarities and differences as they can think of. Ideally, learners will draw their own double bubble map but if they are not yet confident, this worksheet can be printed. The GUIDELINE is not a memo but does give some ideas to consider when comparing a map and a globe.

5. Coggle.it (TechLoaded) can be used online instead of the double bubble map for the comparison activity.
6. Watch the video on how least to distort the map.

ZED TECH	TECH LIGHT	TECH LOADED
• RES1&2: Printed • WS1	• RES1&2: Printed • WS1 OR • RES1&2: Online • Coggle.it	• RES1&2: Online • Coggle.it

Assessment opportunities: Double bubble map: At least 10 valid points of comparison. Use the GUIDELINE to help identify suitable ideas(10 marks)

REFERENCES UTILISED

- Images: www.pixabay.com
- Mercator Map: By Strebe - Own work, CC BY-SA 3.0, https://commons.wikimedia.org/w/index.php?curid=17700069
- RES3: Homemade Globe: https://www.astronomyforthinkers.com/downloads/homemade-globes/earth3d.pdf
- RES2: Printable Map: https://www.printablee.com/post_globe-printable-pattern_343396/
- Video: Ted-Ed: Why every world map is wrong: Kayla Wolf: 2021: https://www.youtube.com/watch?v=eTYsIePy5zg