

AIRPORT CARGO CHALLENGE

Task A

Cargo on aeroplanes refers to goods and products that are delivered to different places by air. Cargo is very important to Heathrow Airport, and each day thousands of items are sent all over the world.



Age: 7-11 years

Skills needed: Problem solving







Rahul

Forwarder




Can you help me transport certain goods from one place to another?

Part of my job as a Cargo Forwarder is to make sure items get here safely, but also consider the cost of the transport and how eco-friendly it is. We also need to think about how long items will take to reach Heathrow as we are responding to an emergency situation.

Can you decide which is the best supplier to use for each item and explain why?

	 TINNED FOOD		 BLANKETS		 TENTS	
	Supplier 1	Supplier 2	Supplier 1	Supplier 2	Supplier 1	Supplier 2
Distance from Heathrow	100 miles	100 miles	45 miles	10 miles	196 miles	25 miles
Transport method	Aeroplane	Rail	Electric Rail	Truck	Hybrid truck (using electricity and petrol)	Truck
Transport time	1 hour	3 hours	1 hour 40 mins	20 mins	4.5 hours	45 mins
Other factors	Supplier packaging is 100% recyclable	Supplier packaging is made from plastic	Supplier has won awards for their eco friendly recycled products	Supplier has invested in cutting edge technology to produce the blankets faster	Supplier uses recycled materials to make tents	Traffic network is very busy so there may be delays

What choices did you make and why?

Tinned Food 	Blankets 	Tents 
I chose Supplier __ because	I chose Supplier __ because	I chose Supplier __ because

SUPPORT: For each product compare supplier 1 and 2. Which one would provide the cargo quickly, (HINT: look at the transport times and other factors), as well as be able to deliver the cargo in a sustainable way, (HINT: look at the transport method and distance, as well as other factors).

ANSWERS: There is no one answer for choosing a certain supplier in the task above. These are your choices based on the your reasons for why you think each supplier would be the best at supplying the items. If you are completing this task with another person you may wish to discuss your choices and see if you agree with one another.

LOADING THE PLANE

Task B

Jenny
Warehouse Operative



Can you please help me fill the plane, so that the cargo is balanced on each side?

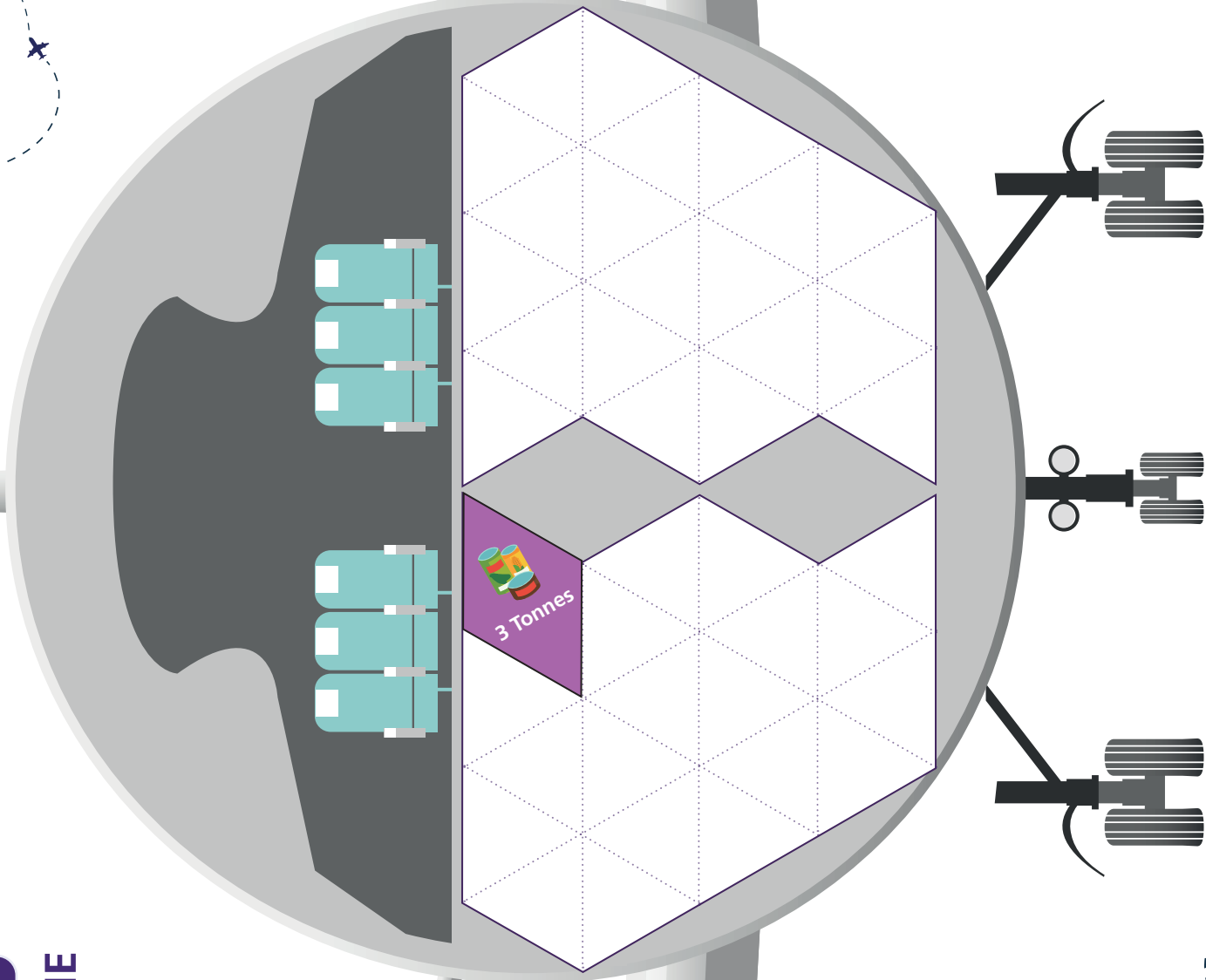
Task:

Look at the cargo on the next page and choose a variety of items to load on to the plane. Use the guidelines provided to colour in where this cargo will go.

To complete the task you must:

- Make sure each side of the plane has 20 tonnes of cargo so that the weight is balanced. Not every item in the storage warehouse will need to be used.
- Draw at least one hexagon in each side of the plane.
- **HINT: a hexagon is a 6 sided shape**
- Label your items with an image and their weight
- Only place items that are available in the warehouse - cross them off as you draw them in

As an example, we have placed the first piece of cargo for you. Can you fill in the rest?



THE CARGO

