Discussion Problems
Step 5: Converting Units of Time

National Curriculum Objectives:

Mathematics Year 5: (5M4) Solve problems involving converting between units of time

About this resource:

This resource has been designed for pupils who understand the concepts within this step. It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

We recommend self or peer marking using the answer page provided to promote discussion and self-correction.
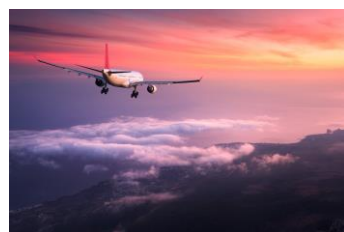
More Year 5 Converting Units resources.

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Converting Units of Time

1. Mary wants to book a holiday in May. She needs to be back at home for work by the 27th May at 08:30 at the latest. Investigate which holidays she could book. Which is the longest holiday she can book?

Destination	Departure Time	Duration
Italy	9th May 13:50	17.5 days
Turkey	10th May 09:45	200 hours
Greece	9th May 20:45	$2\frac{1}{2}$ weeks
Morocco	11th May 11:35	480 hours
Spain	13th May 02:50	21 days 8 hours
France	19th May 21:00	175 hours

Her boss changes his mind and says that she can come back to work a week later. Which is the longest holiday she can go for now?

DP

2. Explore and discuss the statements below.

Brad

By your 10th birthday, you will always be 3,650 days old.

Mae

6 months is 180 days.

Sue

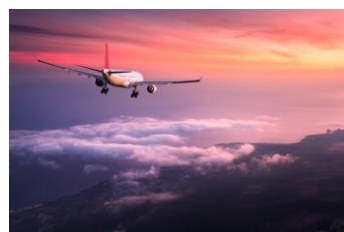I am 12 years old but I have only had 3 birthdays.

Who do you agree or disagree with? Explain why.

DP

Converting Units of Time

1. Mary wants to book a holiday in May. She needs to be back at home for work by the 27th May at 08:30 at the latest. Investigate which holidays she could book. Which is the longest holiday she can book?

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Various possible answers, for example: She could book Italy as she would be back on 27th May 01:50. She could not book Greece as she would be back on 27th May 08:45.
Her boss changes his mind and says that she can come back to work a week later. Which is the longest holiday she can go for now?
A week later would be 3rd June so she could now go to Morocco as she would be back on 31st May at 11:35 but not to Spain as she would be back on 3rd June at 10:50.

DP

2. Explore and discuss the statements below.

Brad
By your 10th birthday, you will always be 3,650 days old.

Mae
6 months is 180 days.

Sue
I am 12 years old but I have only had 3 birthdays.

Who do you agree or disagree with? Explain why.
Various possible answers, for example:
I disagree with Brad as he hasn't counted the extra day during the leap years.
I disagree with Mae as the months have a different number of days and there are not 6 consecutive months that add up to exactly 180 days.
I agree with Sue as if she was born on the 29th February, which happens once every 4 years, she would only have 3 birthdays.

DP