

Who am I? Can you work out the letters from these clues and put them in the sentence below?

1. The first is in **five** but not in **fifty**.
2. The second is in **Windsor** and in **Jubilee**
3. The third is in **crow**n but not in **row**ing
4. The fourth is in **slate** and not in **lanes**
5. The fifth is in **Osborne** but not in **Sandringham**
6. The sixth is in **regal** but not in **legal**
7. The seventh is a vowel in **reign** and in **rain**
8. The eighth is in **Albert** and in **quarry**

Queen _ _ _ _ _ was queen from 20th June 1837 to 22nd January 1901. During this time many houses, churches and important buildings were built and slate was used on the roof to keep the rain out. Slate is strong and lasts for a long time. Slate is a rock that is easily split into smooth, flat plates or tiles.

Challenge 1: How long was Queen Victoria queen for? Can you give your answer in days and years?

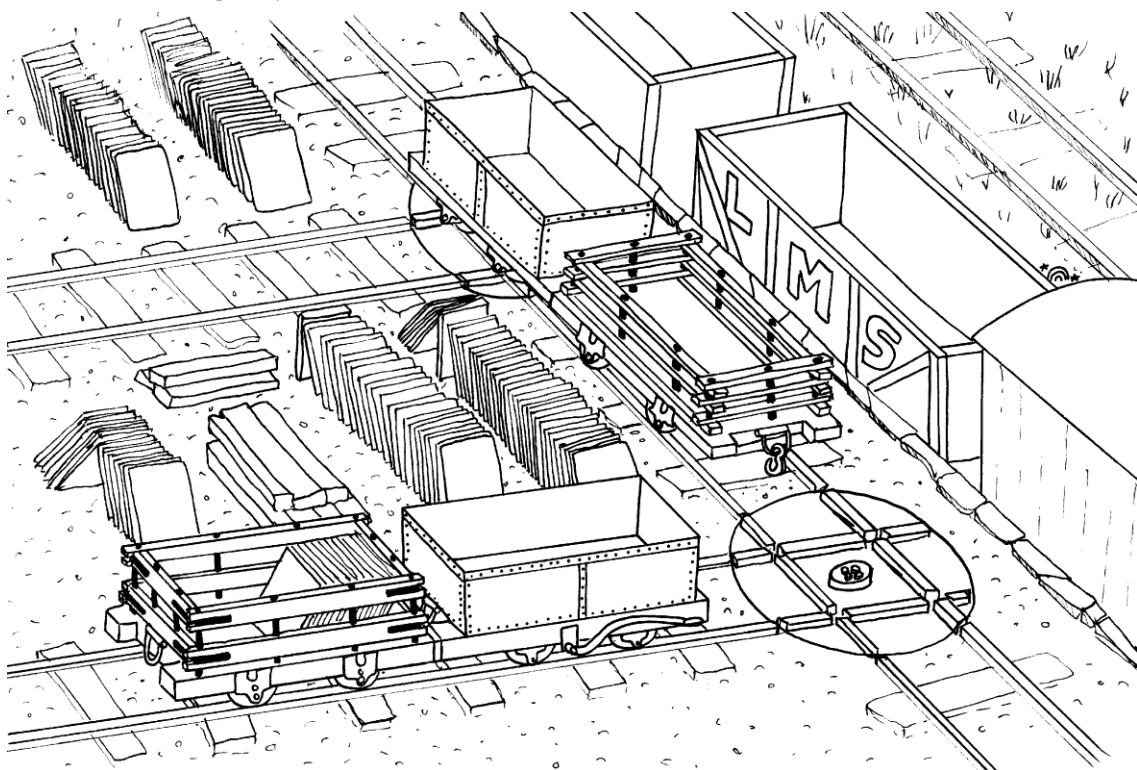
Challenge 2: Can you explain to an adult why slate is a good roof covering?

Challenge 3: Can you spot any slate roofs as you walk around your local area?

Slate at Talyllyn

Many slate tiles came from quarries in North Wales. Narrow Gauge railways were built to transport slate from the quarries. The Talyllyn Railway was built to bring slate from the Bryn Eglwys Quarry to Tywyn. Up to 300 men worked at the quarry. They produced about 300,000 tons of slate and slabs. This would be equivalent to over 23,000 double decker buses! The quarry closed after a landslide on Boxing Day in 1946.

This picture shows a scene at Tywyn Wharf station, where slate was transferred from Talyllyn Railway wagons into main line railway wagons.



Challenge 4:

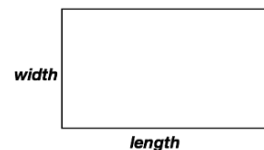
Can you colour in the picture? Remember that slate is a grey colour.

What's in a name?



Did you know that each different size of a piece of slate has a name? Slates are named after female nobility titles. *How many do you recognise from the list below?*

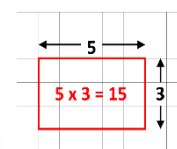
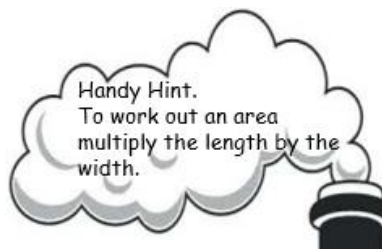
These names were created by General Hugh Warburton at Penrhyn quarry in 1738. It soon became the industry standard and lasted for over two centuries. Slates were measured in inches. The first number was always the length of the slate and the second, the width.



Mini challenge: How many years is 2 centuries?

The table below show the sizes of each type of slate.

Did you know the area of a shape is the **space** occupied by a flat shape or the surface of an object?



Challenge 4: Choose at least 6 of your favourite names and work out the area of each piece of slate? Use column multiplication if you can 😊.

Challenge 5: Measure some rectangles where you are. Can you find any that are the same size as those below?

Slate name	Size in inches (how they were measured in the past)	Size in cm (rounded)	Area of piece of slate in cm ²
Empress	26 × 16	66 × 40	
Princess	24 × 14	60 × 35	
Duchess	24 × 12	60 × 30	
Small Duchess	22 × 12	56 × 30	
Marchioness	22 × 11	56 × 28	
Broad Countess	20 × 12	51 × 30	
Countess	20 × 10	51 × 25	
Small Countess	18 × 10	48 × 25	
Viscountess	18 × 9	48 × 23	
Wide Lady	16 × 10	40 × 25	
Broad Lady	16 × 9	40 × 23	
Lady	16 × 8	40 × 20	
Wide Header	14 × 12	35 × 30	
Header	14 × 10	35 × 25	
Small Lady	14 × 8	35 × 20	
Narrow Lady	14 × 7	35 × 18	
Small Header	13 × 10	33 × 20	
Doubles	12 × 6	30 × 15	
Singles	10 × 5	25 × 13	