

BBC A History of Ideas, "The Golden Ratio: Possibly the best rectangle in the world"

<https://www.bbc.co.uk/programmes/p02bllqm>

Listen to the video and fill-in the blank words

Draw a _____ . Measure **halfway** along the bottom side of the square.
Now draw a semi-circle, using that _____ as its centre, cutting through the **upper right corner** of the square.

Mark the point where the circle crosses the extension of the bottom part of the square. Draw a perpendicular line up from that – **got it!**

Now **join everything** up. You _____ have a rectangle in which the side is 1.6180... (one point six one eight oh...) the number goes on but this is roughly it, times the _____ of the rest of the long side. Congratulations, you have drawn a Golden Rectangle. The proportions, usually known as the golden ratio, or golden section are particularly pleasing – beautiful even.

The ratio has satisfying _____. For instance, we have seen that A to B is approximately 1.6180..., times as long as B to C. But what you might not have **realised** is that A to C is approximately 1.6180..., look you get the point, times as long as A to B. Also the mini-rectangle that you form _____ the main rectangle, when you **drew** the perpendicular, has exactly the same proportions as the big Golden Rectangle that you first constructed. If you join up the **dots**, you get a _____ that is very similar to a **nautilus shell**. It is a pattern that occurs in many plants and animals.

The golden ratio isn't just found in nature. Artists and architects have **knowingly used** it for _____ of years. Parts of the Parthenon and Notre Dame Cathedral seem to be based on it.

If there were a **beauty contest** for rectangles, it would be no surprise if the Golden Rectangle won.

Halfway=mi-chemin

Upper right corner= le coin supérieur droit

Got it (familiar)=compris!

Join up everything=rejoignez tout

Times=fois (two times three equals six: 2 x 3 = 6)

Realised=realise, compris

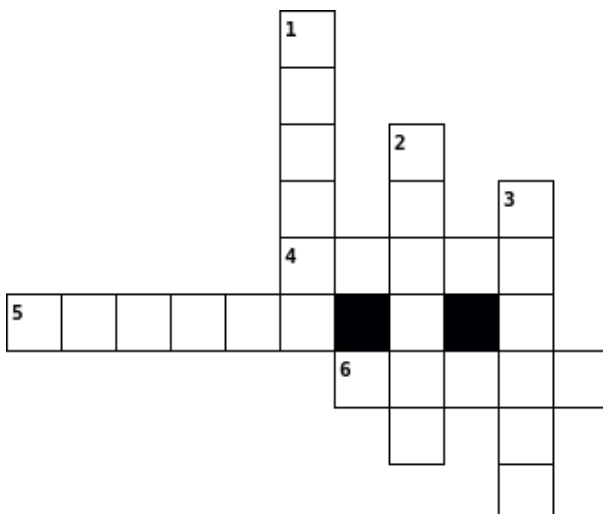
Draw,drew, drawn=dessiner

Dots=points

Nautilus shell=coquille de nautilus

Knowingly used=utiliser sciemment

beauty contest=concours de beauté



Across

- 4. Relation in degree or number between two similar things.
- 5. Something, such as a ring, shaped like such a plane curve.
- 6. dot

Down

- 1. A polygon having four equal sides and four equal angles.
- 2.lower side.
- 3.the place where two converging lines or surfaces meet.

Answers to the blanks: square / point / should / length / properties / within / spiral / thousands