## UNIT 2

Task 1: Test
1-Write the capital letter "E" below :

Measure its length, its width and work out the ratio of its length to its width.
$\mathrm{L}=$
$\mathrm{w}=$
$\frac{L}{w}=$

2-Among the following rectangles, circle the one you think is the most attractive and well-balanced.



## 4



Justify your choice.

## Task 2

Measure each rectangle's length and width, and compare the ratio of length to width for each rectangle above:

| Rectangle | $\mathbf{1}$ | $\mathbf{2}$ | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Length (L) cm |  |  |  |  |  |  |
| Width (w) cm |  |  |  |  |  |  |
| $\frac{L}{\mathbf{w}}$ |  |  |  |  |  |  |

## Task 3 Pairwork

Find at least three rectangles in the room and fill in the following table.

| Rectangle |  |  |  |
| :--- | :--- | :--- | :--- |
| Length (L) cm |  |  |  |
| Width (w) cm |  |  |  |
| $\frac{L}{w}$ |  |  |  |

Highlight the one that seems to be more attractive, well -balanced?

## Task 4:

Draw a segment 10 cm long then make a small mark on it 6.2 cm along.

Divide the length of the whole line by the length of the long section. Divide the length of the long section by the length of the short section. What ratios do you get?

## Task 5: Pairwork

We consider a segment $[\mathrm{AB}]$, and we wish to cut it at a point P so that the ratios $\mathrm{AP}: \mathrm{AB}$ and $P B: A P$ are the same.

Make a free hand figure.

We'll consider $\mathrm{PB}=1$ (unit), and let $\mathrm{AP}=x$.
Express AB in terms of $x: \mathrm{AB}=$
Express the ratios $\mathrm{AP}: \mathrm{AB}$ and $\mathrm{PB}: \mathrm{AP}$ and work out the value of $x$ such that they are the same:
$\frac{A P}{A B}=$
$\frac{P B}{A P}=$
$\frac{A P}{A B}=\frac{P B}{A P} \Leftrightarrow \ldots$

## Task 6

Unscramble the words to find out the various names of this ratio.


Choose one of those names to be the title of the current lesson and write it in the title box.

This number is:

$$
\phi=
$$

$\phi \approx$

## Task 7: collaborative learning (group workshop)

Group A: Art
Group B: Architecture
Group C: Fibonacci
Group D: Nature
Group E: Properties

