

## Year 4 Knowledge Organiser - Mindful Moments Timer



### Product Forms

Many products that have similar functions take different forms.



on-screen  
timer



sand timer



egg timer

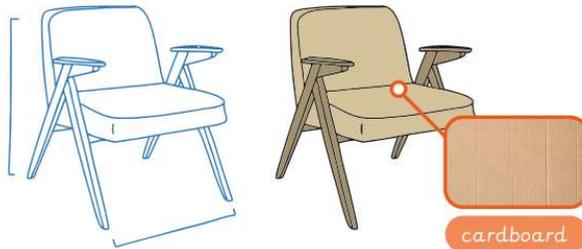


wind-up  
timer

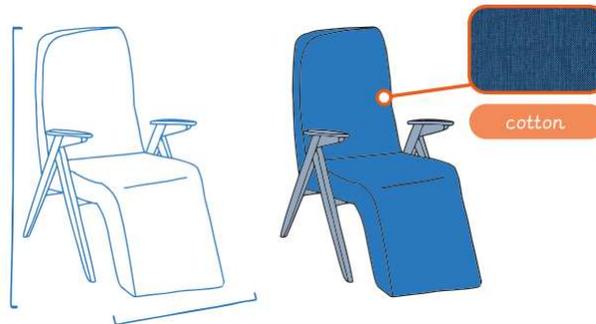


### Prototypes:

Prototypes are the first examples of a product made with cheap, easy-to-find materials. They let you test the form and function of an idea and help gather feedback about ergonomics and aesthetics.



They help you make better decisions about size, shape and materials for the next version or the final design.



### Key vocabulary

**Advantage** – Something good about a product that helps the user.

**Aesthetic** – How something looks.

**Brand** – A particular company's product and logo.

**Disadvantage** – Something about a product that makes things more difficult.

**Ergonomic** – How comfortable a product or piece of equipment is to use,

**Exhibition** – An event where things are shown to the public.

**Loop** – A series of instructions that is repeated.

**Prototype** – A first example of something.

**Research** – A detailed study of something to get more information.

**Variable** – A word that stands for a set of values or numbers.

## Countdown from 30

```

on button A pressed
  set Seconds to 30
  while Seconds > 0
  do
    show number Seconds
    pause (ms) 200
    change Seconds by -1
  clear screen
  
```

## Adding visual effect and adding reset

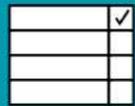
```

on button A pressed
  set Seconds to 30
  while Seconds > 0
  do
    show number Seconds
    pause (ms) 200
    change Seconds by -1
  show icon [grid icon]

on button B pressed
  set Seconds to 0
  pause (ms) 5000
  clear screen
  
```

### Tips For a Good Evaluation:

Check your design against the design criteria.



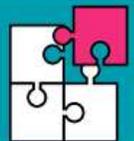
Note down something you have done well.



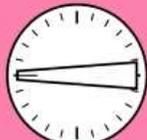
Get feedback from someone else.



Suggest a change.



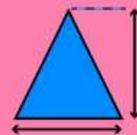
Must be for a teacher.



The timer must last for a specific time.



Must be programmed using code.



Size and shape must be clear.



Must use CAD to create a brand identity.



Must get feedback from the user.