

# NPA Knowledge Organiser: Year 4 DT - Summer

Our topic this term, is Digital Moments: A mindful moments timer. The children will be looking at creating a mindfulness timer and when it might be useful for people to use them. They will look at using prototypes to create a series of aesthetic covers for their timers before choosing a final design.

When could you use a timer?



## Digital Moments: Mindful moments timer



### Why is mindfulness important?



<b>Advantage</b>	A positive gain or benefit.
<b>Design process</b>	The steps taken to develop a new product (design-make-evaluate).
<b>Disadvantage</b>	A negative circumstance or condition.
<b>Ergonomic</b>	Designed to be comfortable.
<b>Program</b>	A series of code which instructs an electronic device to perform specific tasks.
<b>Programming loop</b>	A piece of code that repeats until instructed to stop.
<b>Prototype</b>	A simple model that lets you test out your idea - how it will look and work.
<b>Variable</b>	This could be a number or text, that can change each time the program is run. Variables often work in combination with selection to change the end result of the program.

Many products are made in a variety of forms and some also have digital and analogue versions.

Microwave timer



Sand timer



Egg timer



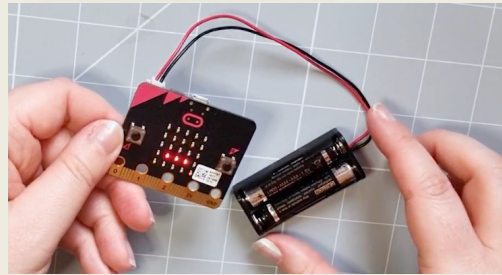
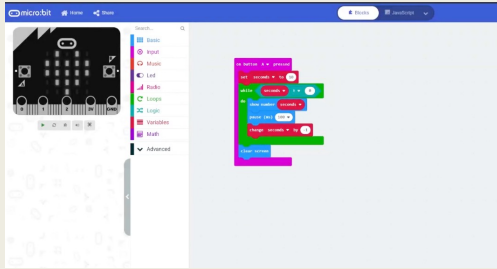
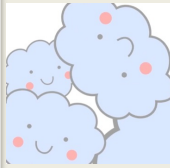
On-screen timer



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Don't forget to think of a logo to go with your designs!

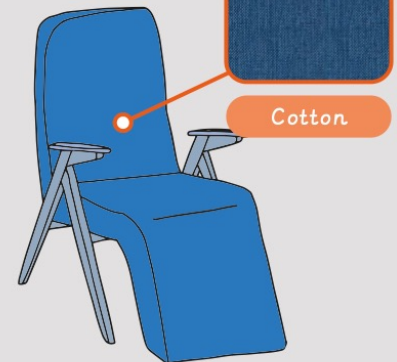
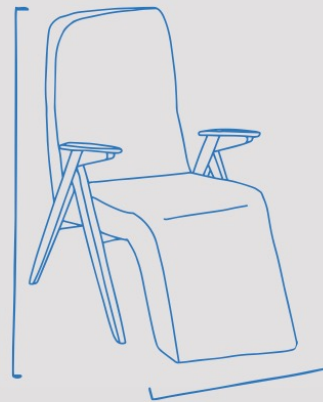


Creating a prototype is an important part of the design process. Prototypes are cheap models that let us test the form and function of an idea.



Cardboard

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



Cotton

We will be using computer technology and our coding skills to programme our timers to run for a certain amount of time and play a specific tune. We will then design outside cases for the timer that appeal to our target audience. It will need to capture their attention and convince them to use our devices.

