

### Warm Up – Estimation

*What can the teacher do before school?*

On the way to school today the teacher had to make a decision. It was 7:00 am and she only had one hour to get to school. She wanted to stop to get paint and markers for the class. It takes her 20 minutes to drive to school without stopping. She estimates it would add 15 minutes to her trip if she stopped at the paint store and another 16 mins if she stopped for markers.

<b>Does the teacher have time to stop for paint and markers? (Yes/No)</b>	
<b>How do you know?</b> <i>Show your work.</i>	

### Mini-lesson

*What activities can you accomplish in an hour?*

#### Activities:

- Play soccer with friends (24 min)
- Play a game of go-fish (15 min)
- Ride a bicycle to the park (17 min)
- Walk home (10 minutes)
- Watch a video on the internet (12 min)
- Visit a friend or family (35 min)
- Jump rope with a friend (17 min)
- Listen to a song (5 min)
- Read a book (12 min)

## Lesson 1.5 - Time's Up

*Student Workbook Component*

**Review the list of activities above and come up with two ways to complete the maximum number of activities in one hour.**

<p><b>Option 1</b></p>	
<p><b>Option 2</b></p>	

## Lesson 1.5 - Time's Up

*Student Workbook Component*

### Keyword Review

Using the word bank below, choose the best keyword to complete each sentence.

time	calculate	hour
minute	second	millisecond

"There is no \_\_\_\_\_ like the present!" she exclaimed. And

then used her watch to \_\_\_\_\_ the amount of time she

had remaining. She knew that 60 \_\_\_\_\_ equal one

\_\_\_\_\_ and that 1000 \_\_\_\_\_ equal

one \_\_\_\_\_

**Let's Discuss:** *How many minutes and seconds make up an hour? In your workbook or with a partner, record, discuss, or share one of the strategies you used to solve the problem.*

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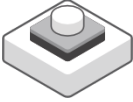


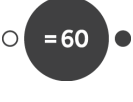

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### Challenge 1

Create a counter with an alert for an addition/subtraction game

#### Plan your system

##### 1. What blocks do you need?

	The Button or Key Press block act as the input to start the system working
	The Interval block allows the user to set the time from milliseconds to hours as it sets pulses in time
	The Counter block counts up
	The Compare block acts as a question. It looks at whether its condition is the same as the counter before activating the output
	The RGB light acts as the output and the colour of the light can be edited.

**2. Sketch your plan:** Think about the SAM system you want to create and use the space below to draw it out.

- Which are your inputs and outputs? (*Remember inputs on the left connected to your output on the right*)
- How will they be connected together?
- What settings do you need to edit?

## Lesson 1.5 - Time's Up

### Student Workbook Component

**3. Predict and test settings:** Think about what you will set the Compare block to be and the outcome this will have.

Compare Block Setting	Prediction	Outcome
<i>E.g. set to &lt; 3</i>	<i>E.g. the light will be activated when counter less than 3</i>	<i>E.g. this works but when the counter keeps going the light is off</i>

**Why do you think the order of steps important?**

We can use transitional phrases to talk about the order events or actions that take place. Practice by using transitional phrases in order to present your system.

Time & Sequence	Compare (+)	Contrast (-)	Cause and Effect
first/second/third	also	but	because
next	equally	however	so
after	likewise	otherwise	therefore
then	in addition	on one hand... ...on the other hand	as a result
finally/overall/to sum up	similarly	opposite	due to