# Starting up your Lego Spike Prime Experience

MaFEA – Making Future Education Accessible PR2 – Guiding successful adoption

















# MaFEA Guide for Lego Spike Prime

#### A Brief introduction

Most of us are familiar with Lego. Some of us will know Lego Technic or Lego Mindstorms. Lego Spike Prime is a variant of Lego Mindstorms that is meant for classroom use. Physically the two are very similar. The big difference is the explanation and instructions of Lego Spike Prime. Lego Spike Prime has a supporting app and website where teachers can get lesson plans meant for the teacher, besides the lessons meant for the students.

According to the Lego website Spike is a solution that combines hands-on building with digital coding. We've probably all done some hands-on building with Lego. It is easy to understand and easy to work with. Digital coding is probably the opposite. Some of us might have some experience, but most of us won't. Luckily Lego Spike Prime uses a relatively simple way of teaching programming called blocks.

Combining hands-on building with digital coding makes for a combination where physical and digital technical skills come together. A great opportunity for learning!

Kommentoinut [JL1]: WIP



# Unboxing your Lego Spike Prime box.

#### 1. Recognizing the situation.

If you're using your Lego Spike Prime for the first time, we need to check in what situation our Lego Spike Prime is in. There is a chance you are using a brand-new set. Or you might have a used set. Depending on the organisation of the content of the box, we can see if it has been used or not. These two options give us two different starting points.



Figure 1: Unopened Lego Spike Prime box

Figure 1. Gives us an overview of a brand-new Lego Spike Prime box. Does your box look like this? Go to 2. Brand new box. Does it look like figure 2. See <u>3. Used Box</u>



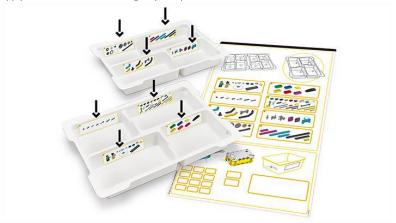
Kommentoinut [JL3]: Add photo of used box



#### 2. Brand new box.

Lucky you! You have a brand-new box! There are a few steps we need to take before we can start.

1. Apply the stickers to the sorting tray compartments.



#### 2. Sort the elements from bags 1-8 into the appropriate compartments.\*\*

\*\*Note: The 2 unmarked bags containing the larger elements should be stored in the bottom of the yellow storage bin. Bag 13 contains an assortment of small and essential elements that often go missing. Set this bag aside until it's needed.





# 3. Insert the battery into the SPIKE $^{\text{\tiny{IM}}}$ Prime Hub.



 ${\it 4. Label the storage box with a number and all of the SPIKE\ Prime\ hardware\ for\ easy\ classroom\ management.}$ 





#### 3. Used Box.

Lucky you! This saves us some time stickering. Please check figure 3. If the most important contents are inside of the box. These are the hub marked 1. The motors marked 2, and the sensors marked 3. These need to be in the box. There is a chance some other parts could be missing. Luckily Lego added some extra bits and pieces.

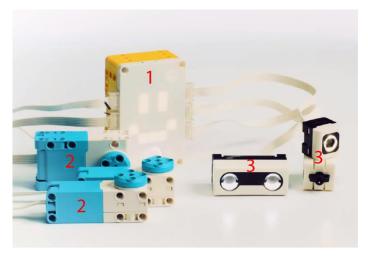


Figure 3: Electronic components of the Lego Spike Prime box

# 4. Final step.

After checking your Lego Spike Prime box and following the right step(s) we can continue to the next guide. This guide is called "Hands on with Lego Spike Prime". See you there!

Kommentoinut [JL4]: Link figure 3