Chapter 1 : LEGO EV3 Expansion Set Inventory | Brick Owl - LEGO Marketplace

Inventory for Education EV3 Expansion Set. This set inventory has been obtained from LEGO Customer Services replacement parts page.. Important note: We do not control this inventory and cannot currently make changes to it.

We have home users children and hobbyists and educational users students and teachers. LEGO has designed a base set for each group, as well as several add on sets. This article aims to clarify the differences between the two product lines so you can decide which product works best for you. Which set to choose? The facts and figures on this page may help you decide which set works best for you in terms of hardware and software, but there are other criteria as well. Which set is the most fun? See this article for some additional considerations. It is often referred to as the Home Edition or Retail Edition. You can also control your robot with your smart phone, or with the infrared remote control that comes with the set. The set also includes 7 connector cables and a USB cable for programming. The set further contains nearly building elements, including beams, axles, gears and connectors, as shown in Figure 3. The inside of the cardboard packaging contains a mission pad link. You can view an unboxing video of the set here link. The set includes building instructions for one vehicle with various sensor attachments. More building instructions are available here link. The set includes a rechargeable battery for the EV3 brick and a charger. The set contains nearly building elements, including beams, axles, gears and connectors, as shown in Figure 6. The sturdy plastic box further contains storage bins for your Technic elements. To find the parts you need, start with the diagrams above. He has additional information here. See also the instructions in the above files. Note that the Infrared Sensor has exactly the same shape as the Ultrasonic Sensor. Both sensor can sense distance, but the Ultrasonic Sensor is more accurate for distance sensing. On the other hand, the Infrared Sensor also serves as the receiver for the Infrared Remote. Both the computer software and the tablet app comes in two versions: The Home Edition and the Education Edition for teachers and students. The software includes a programming environment, and building and programming instructions for the robots you can build with the Home Edition set. The software does not require a license key, so you can download the software early to see if you like the programming language, and to avoid waiting for a big download when you want to get started building and programing. The installation file is about MB in size. I found the following system requirements in the installation folder. I added a few comments in parenthesesâ€"they are not official comments. Download and run the free software to see if it works before you buy the set! Note that it does not work on Windows 8. For example, my quad core processor is just 1. The system requirements are the same as given above. As of , no paid license is required to download, install, or run this software. The software includes a programming environment, and building and programming instructions for the robots you can build with the Education Core Set and the Education Expansion set In addition, it contains a data logging environment for science experiments. For example, you can plot a graph of the light level in a room, and see it change over time. In fact, you can install both versions of the software on the same computer, if you like. See this page for download and installation instructions. This allows you to build bigger robots such as an elephant and a stair climber link. The set includes over building elements including beams, axles, and gears, as shown in Figure 7. It does not contain any electronic elements. In particular, the set contains 9x O-frames, 6xH frames, 13x 15M beams, and numerous gears including a differential and a turntable. You can simply use 6x AA batteries. You may want to invest in 6 high performance rechargeable batteries with a dedicated charger. Be sure to buy the charger that fits the plug in your country. No need to take your robot apart when the batteries run empty. Some books contain instructions for robots you can build with the Home Edition set while others contain instructions for the Education Core Set Alternatively, just get the book you like, and upgrade your LEGO collection with the pieces needed for the activities in that particular book. This book helps you get the most out of your EV3 set. You can learn more about the book here. This book is divided into several parts. The first parts Chapter introduce the reader to programming. The programming software for the Education or the Home version is essentially the same, so you can use this book to learn how to program regardless of which set you have. New concepts are demonstrated using a simple vehicle robot. If you have the Education set, you can build the vehicle according

to the instructions in that set, and just follow along with the programming tutorials in this book. The same holds for the programming tutorials in Chapters , which you can also do with the pieces in either set. In addition to programming tutorials, the book also contains chapters 12, 13, 18, and 19 with building instructions for bigger robots, like the walking humanoid on the front cover of the book. The official Commander app is targeted at Home Edition users, with specific controls for the Home Edition robots, but it also works with the Education Core Set. In addition, you can create their own customized remote to control each motor connected to the EV3 brick. You can also program the EV3 with a tablet link. Once transferred to the brick, the robot can run the program on its own. While this works great for small setups at home, it can be frustrating to set up in classrooms, because classroom computers may not have administrator rights for Bluetooth drivers or they might not have access to configure wireless network settings for WiFi. If you plan to use wireless capabilities in the classroom, consider buying just one dongle so you can try it out before you buy one for each set. Questions and comments The article and the illustrations are copyright c by Laurens Valk, unless stated otherwise. Use the information in this article at your own risk. Did I miss some information in this article? Did a link break? Please post comments and suggestions below. If your question is off topic, please search for the appropriate article on this website and post it there, or use the contact page link.

Chapter 2 : LEGOÂ® MINDSTORMSÂ® Education EV3 Core Set

Some LEGOÂ® sets contain small parts that are NOT suitable for and may pose a hazard to children under 3 years of age. LEGOÂ® DUPLOÂ® sets have larger pieces which are specially designed for children under 3.

Chapter 3 : LEGO EV3 Expansion Set (Mindstorms > EV3) | Rebrickable - Build with LEGO

This is the parts inventory for the EV3 Expansion Set It contains parts. If you want to buy from this inventory, you can part it out into your wishlist. This inventory may not be % complete and should only be used as a guide.

Chapter 4 : Lego Mindstorms EV3 Expansion Set ()

Already have some of the parts? Use the Build this Set page to only show the parts you are missing.

Chapter 5 : BrickLink Reference Catalog - Inventory of Set

Use this page to compare the contents of two different LEGO Sets, MOCs, or Custom Lists. Find out what parts they have in common, or what parts are unique to each.

Chapter 6 : education - What is different between the EV3 Home and Educational sets? - Bricks

Inventory for Education EV3 Core Set. This set inventory has been obtained from LEGO Customer Services replacement parts page.. Important note: We do not control this inventory and cannot currently make changes to it.

Chapter 7 : Compare LEGO Sets/Lists - vs | Rebrickable - Build with LEGO

set () (S ee 'LEGO MINDSTORMS Education EV3 Expansion Set' below). Y ou'll get more value for money this way, but you may still need to buy certain pieces separately.

Chapter 8 : Brick Owl | Brick Owl - LEGO Marketplace

The Expansion Set contains a wide range of structural and mechanical elements to augment the LEGO MINDSTORMS Education EV3 Core Set. Students can deepen their experience with the additional building programs and instructions.

Chapter 9 : Inventory for Education EV3 Core Set | Brickset: LEGO set guide and database

The attached pdf files are great summaries of the EV3 Parts by category. The summaries provided here are for the Core Set () and the Expansion Set().