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Product Summary Sheet #1

3 per team member. This is individual work.

Instructions

In your engineering notebook or on this form, document each product available on the commercial or retail market related to the major project problem you have identified. Summaries must have more than three sentences.

Website for Product (URL):

[Amazon.com: Butterfly EduFields 100+ STEM Projects | Girls Mini Engineering Kit for Ages 8 10 12 15 Years | Ultimate DIY Science Experiments for Kids | Educational Engineering Toys Best Birthday Gift idea : Toys & Games](https://www.amazon.com/Butterfly-EduFields-100-STEM-Projects-Girls/dp/B07KJLWVZG)

Product Summary:

The Butterfly EduFields STEM Kit is an educational set designed for children ages 8 to 12, particularly aimed at encouraging girls to explore engineering and science. It includes over 50 circuit components that can be combined to create more than 100 projects. The kit emphasizes hands-on learning of core STEAM concepts like circuits, mechanics, and problem-solving, while fostering creativity and curiosity.

Product Critique Summary:

This engineering kit is priced at more than \$40 for a “kit” of various components with confusing instructions according to reviews. Not only is the cost-effectiveness of this kit questionable, the promotional material for this engineering kit includes AI artwork and promotes certain schematics (such as hair dryer, vacuum cleaner, massager, and a coffee mixer) which is leaning, intentionally or not, into outdated stereotypes that associate girls with primarily domestic roles or beauty, which is counterproductive to the stated goal of empowering them in STEM.

Images/sketch of Product:



Product Summary Sheet #2

3 per team member. This is individual work.

Instructions

In your engineering notebook or on this form, document each product available on the commercial or retail market related to the major project problem you have identified. Summaries must have more than three sentences.

Website for Product (URL):

[Amazon.com: WhalesBot B3 Pro 24-in-1 STEM Card & Pen Coding Robot Kit for Kids, 99-Piece Educational Building Set with Interactive Storytelling, Ideal Toy Gift for Boys & Girls Ages 4-6 : Toys & Games](https://www.amazon.com/WhalesBot-B3-Pro-24-in-1-STEM/dp/B07WZLJH4F)

Product Summary:

The WhalesBot B3 Pro 24-in-1 STEM Card & Pen Coding Robot Kit is an innovative, screen-free educational toy for children aged 4 to 6. It utilizes a unique coding pen and card system to introduce coding concepts in a creative and eye-safe manner, all while fostering STEM learning. The kit supports the construction of up to 24 robot models through guided tutorials and encourages imaginative design. It also includes three engaging storybooks that weave narrative into the coding experience.

Product Critique Summary:

This product is extremely expensive relative to other comparable robotics kits, being around \$120 on sale and the list price being \$150. The inflated price point seems to be a result of the unique pen coding of this kit, while novel, it's a gimmick and a poor one at that. The pen coding does an inadequate job at teaching the fundamentals of coding mainly due to the lack of any persistent logic, the user has to *manually* drag the pen over the intended action blocks during runtime. A better system can easily be achieved through an ecosystem such as Scratch, Arduino, or even a simple bluetooth app while being more cost-effective.

Images/sketch of Product:



Product Summary Sheet #3

3 per team member. This is individual work.

Instructions

In your engineering notebook or on this form, document each product available on the commercial or retail market related to the major project problem you have identified. Summaries must have more than three sentences.

Website for Product (URL):

[Amazon.com: Toddler Girl Toys, Magnetic Tiles Basic Set, Birthday Gifts Ideas for Girls Age 3-5, Magnetic Building Blocks, Magnet STEM Montessori Toddler Kids Christmas Toys Gifts for 3 4 5 6 7 Year Old Girls : Toys & Games](https://www.amazon.com/Toddler-Girl-Toys-Magnetic-Tiles/dp/B07HJLZPQW)

Product Summary:

The Rurvale Magnetic Tiles Building Set is a toddler-friendly STEM toy designed for children ages 3 to 7. Made from non-toxic ABS plastic with smooth, rounded edges, the set includes colorful magnetic blocks that allow kids to build structures while exploring shapes, colors, and basic engineering concepts.

Product Critique Summary:

This building set's list price of \$23 feels inflated for the quantity of pieces you get (16 square pieces, 12 triangle pieces). This is exacerbated by the promotional material showcasing builds that require more pieces than you will actually get in a box. Granted, the sale price of \$13 is much more competitive and partially excuses these problems. Although, while marketed under the STEM umbrella, it's a stretch to classify it as a STEM toy, only really teaching architecture and it feels as if the designers knew that, and added in math flash cards as an excuse to market it the way they do.

Images/sketch of Product:



