

## 2019-2020 TEACHER TIME

### EXPLORING ENGINEERING WITH PRESCHOOLERS

#### Books That Support Engineering Thinking for Preschoolers

As you plan to use books with children, first take some “LAB notes”.

#### **L= Learning.**

What scientific concept will be introduced or deepened with this book?

#### **A= Advanced Vocabulary.**

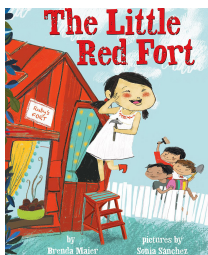
What are some words that might be new or fun that we could use in our interactions and learning activities?

#### **B= Beyond the Book.**

What can I do to extend or reinforce or connect to other learning beyond the book?

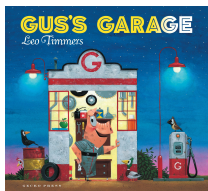
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#### BOOK LIST



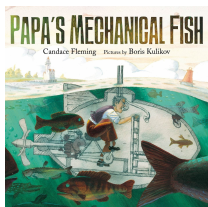
#### **The Little Red Fort** by Brenda Maier and Sonia Sanchez (available in Spanish)

This is a reimagined edition of the traditional tale – The Little Red Hen. This story is about a girl, engineering and technology. Ruby decides to build a fort and asks for help along the way – but no one does – in fact she gets some push back telling her she can’t do it – but she does! She uses engineering design process to build her fort, and eventually her friends agree to help her complete the fort. Think Beyond the book – maybe there will be an indoor or outdoor fort-building opportunity?



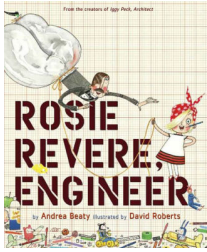
#### **Gus's Garage** by Leo Timmers

This is a bright, bold and colorful rhyming picture book that children will adore. Gus is a pig and owns a garage. He is a hoarder and collects and fills his garage with all sorts of seemingly useless bits and bobs. When his friend Rico the Rhino comes along with his scooter that is just too small for him, Gus uses some of his bits and bobs to create a larger seat on the scooter so that Rico can be more comfortable. This leads to other animal friends coming along with their own unique problems which Gus helps them solve with ingenious creations using his collected junk. This book shows Gus using the engineering design process to solve problems – in creative and silly ways! “Bits and bobs” might be a new term for your kids – it’s fun to say, so look for ways you can incorporate it into your day – maybe in the art area!



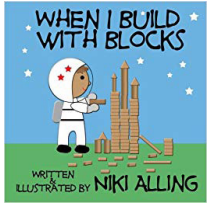
#### **Papa's Mechanical Fish** by Candace Flemming

It’s always a good idea to bring some books into your learning environment that are inspired by actual inventors! In this case, it’s Lodner Phillips, a 19th century inventor, and in this story, he builds his greatest creation thanks to his inquisitive daughter. The real Phillips designed some of the earliest submarines. This book includes some great advanced vocabulary and will hopefully inspire the little engineers you work with to invent something new!



### **Rosie Revere, Engineer** by Andrea Beaty

This book celebrates failure as a good thing! Rosie Revere is always designing and creating but is afraid to show anyone what she has built. Until her great-great-aunt shows up and encourages her to build exactly what she has designed and to keep trying, even if it doesn't turn out as planned. There are fun words and new vocabulary. This is a wonderful opportunity to take the concept of “persistence” Beyond the book.



### **When I Build with Blocks** by Niki Alling

This beautiful and imaginative book follows a preschooler as he designs and builds in the block area. We see the block structures through the boy's eyes, as he imagines himself as a pirate on a ship and an astronaut on the moon. This book is sure to inspire your preschoolers to take their imaginations to the block area and design and build their own stories. This book provides a connection between engineering and the arts – block play and dramatic play!