# 3-5th Grade Certificate Master List

## Elon Musk Ingenuity Award

Elon Musk, CEO of Tesla, SpaceX and more, is known for his ingenuity as demonstrated through his engineering skills. Musk's creativity has led to the design of solar powered roofing, the possibility of a high-speed hyperloop train, and madeTesla a leader in the electric car industry.

## Kimberly Bryant Technology Award

Kimberly Bryant is an electrical engineer who founded Black Girls Code. Bryant's program teaches basic computer programming skills to young black girls, who are often underrepresented in the technology field.

## Marie Curie Scientific Thinking Award

Marie Curie is the first woman to win the Nobel Prize, the creator of France's military radiology centers, and member of the League of Nations. Curie's great scientific thinking led to the discovery of the elements polonium and radium.

#### Rosalind Franklin Determination Award

Rosalind Franklin was a chemist and X-Ray crystallographer whose work greatly contributed to understanding the structures of DNA. Franklin is known for her determination as her complex work helped solve many mysteries involving viruses.

#### Debbie Sterling Creativity Award

Debbie Sterling, CEO of children's science toy company GoldieBlox, is an advocate for women in engineering and technology. Sterling's creativity has led her company to be awarded "Most Innovative Company of 2014," and she herself has been Time Person of the Moment.

## George Carruthers Innovation Award

George Carruthers is an African American inventor, space scientist, and physicist who invented the ultraviolet camera for NASA, which was used when they launched Apollo 16. Carruthers' innovative ideas helped reveal the mysteries of space and the Earth's atmosphere.

#### Valerie Thomas Visionary Award

Valerie Thomas is an African American scientist and inventor who created the illusion transmitter, and worked for NASA. Thomas's visionary creation led to developments in NASA, surgery, and television.

#### Steven Chu Precision Award

Steven Chu is an American physicist known largely for his research on trapping and cooling atoms with lasers. Chu's scientific precision won him the Nobel Prize in 1997, along with his colleagues.

### Noriko Osumi Investigation Award

Noriko Osumi is a Japanese neuroscientist who was appointed the vice-president of Tohoku University. Osumi uses her investigative skills in her studies on brain development and evolution, and also diseases that affect the central nervous system.

#### Cecilia Aragon Perseverance Award

Cecilia Aragon is an American computer scientist who focuses on enabling humans to explore and gain insight from vast data sets. Aragon created the treap data structure, a type of binary search tree that orders nodes by adding a priority as well as a key to each node. Aragon's perseverance resulted in being awarded the Presidential Early Career Award for Scientist and Engineers.

## Carlos Juan Finlay Problem Solver Award

Carlos Juan Finlay was a Cuban epidemiologist who pioneered the research on Yellow Fever. Finlay's problem solving skills helped him to determine that Yellow Fever was transmitted through mosquitoes.

# Ellen Swallow Richards Making An Impact Award

Ellen Swallow Richards was one of the first female professional chemists and the first woman to be accepted by Massachusetts Institute of Technology. Richard's impact in the field of sanitary engineering led to the first state water quality standards in the nation, and her impact in food and chemistry led to the creation of the Food and Drug Administration.