

# SCIENCE AT SPRUCE STREET SCHOOL

Scientific studies at Spruce Street School foster the belief that science is a vital means of solving problems and making the world a better place. Students grow to see themselves as curious and competent scientists, who observe the environment around them and seek explanations. As active participants in a community of scientists, they collaborate in investigations, and share questions and conclusions. They are critical scientific thinkers, who listen actively to others' ideas and evaluate the validity of their conclusions. They are intellectually honest scientists, ready to reexamine their beliefs and assumptions based on the results of their own investigations or the arguments and conclusions of others.

## SPRUCE STREET STUDENTS DEVELOP SKILLS FOR SCIENTIFIC INQUIRY BY:

- Researching and gathering scientific information
- Using scientific methodology to design and implement scientific investigations:
  - Posing questions
  - Hypothesizing
  - Planning an experiment
  - Making observations
  - Gathering and interpreting data
  - Drawing conclusions and determining accuracy
- Revising thinking based on findings
- Repeating trials and comparing results
- Documenting and recording results in an organized format using note taking, graphs and charts
- Presenting and defending results orally and in written form
- Utilizing additional skills:
  - Classifying
  - Measuring
  - Comparing and Contrasting
  - Properly using tools including microscopes, balances, cylinders, etc.
  - Determining validity of resources

