

1ST GRADE SCIENCE CHECKLIST

Goals 11 – 13

Illinois Learning Standards A – F

Performance Descriptors

SCIENTIFIC INQUIRY

_____ Students will describe an observed science concept using **any** of the following:

- _____ appropriate senses
- _____ estimates
- _____ measurements
- _____ describe changes (starting and ending conditions or graphs)

_____ Begin guided inquiry using **any** of the following:

- _____ ask questions using prior knowledge and observations
- _____ generate new questions
- _____ generate strategies to investigate questions

_____ Collect data for guided inquiry by using **any** of the following:

- _____ making estimate
- _____ measurements
- _____ recording observations
- _____ reading data from data-collection instruments

_____ Record and store data using **any** of the following:

- _____ assemble pictures to illustrate data
- _____ organize data on charts, pictographs, tables, journals or computers

_____ Analyze and display results using any of the following:

- _____ identify and describe patterns
- _____ note similarities and differences in patterns
- _____ predict trends

_____ Communicate individual and group results using **any** of the following:

- _____ identify similar data from others
- _____ generalize data
- _____ draw simple conclusions

_____ Propose ideas for solutions to technological questions by asking questions

_____ Communicate results of design tests by

- _____ comparing data from student trials to evaluate design
- _____ reporting followed procedures
- _____ propose modifications for design solution

LIVING THINGS

- _____ Compare living and non-living things
- _____ Describe the basic needs and characteristics of living things
- _____ Sort common structures and functions for animal & plant groupings
- _____ Classify common animals by size, color, family units and shape
- _____ Be able to groups plants and animals to seasonal, age changes and parent characteristics
- _____ Identify the common characteristics of habitats
- _____ Match groupings of animals (lion's pride, gaggle of geese)
- _____ Predict what would happen to organisms when environmental resources are changed. (seasonally or climatically)

MATTER AND ENERGY

- _____ Explore sources and types of energy
- _____ Experiment with sounds by vibrating different materials
- _____ Explore ways heat, light and sound are produced naturally and artificially.
- _____ Compare solids, liquids and gases and how they change states.
- _____ Sort objects by similar large-scale physical properties.

FORCE AND MOTION

- _____ Describe how push or pull may affect the motion of objects.
- _____ Classify materials by their magnetic attraction or repulsion.
- _____ Sort examples of simple machines.
- _____ Change the position and motion of objects.

EARTH AND ITS RESOURCES

- _____ Sort pictures of different land features
- _____ Identify the basic features of globes or maps
- _____ Classify major sources or uses of water
- _____ sketch atmospheric features seen in the sky over time
- _____ Collect daily weather data
- _____ Predict local weather conditions based on collected data
- _____ Create a pictograph or other graphic display of local weather patterns
- _____ Sort different examples of simple natural resources
- _____ Identify the origin of these examples with their recyclable possibilities
- _____ Explore the sizes of the planets using models
- _____ Record daily and or nightly moon sightings
- _____ Record observations of the daily path of the sun over time or compare shadows over the day
- _____ Observe the daily and seasonal differences of the day and night sky

This checklist is a suggested guideline.

SCIENTISTS, SAFETY, AND DATA

- _____ Explain when and why electricity can be harmful or helpful
- _____ Role-play what should be done in case of fire
- _____ Record scientific data accurately and honestly
- _____ Compare observations by different students observing the same thing
- _____ Report data from repeated observations across timed intervals
- _____ Use instruments for measuring length and temperature
- _____ Identify individuals and their discoveries or inventions
- _____ Identify familiar jobs and careers from Science field
- _____ Identify types and causes of pollution
- _____ List materials that can be recycled
- _____ Suggest ideas for reducing, reusing or recycling renewable resources