

This checklist is a suggested guideline.

2ND GRADE SCIENCE CHECKLIST
Goals 11 – 13
Illinois Learning Standards A – F
Performance Descriptors

SCIENTIFIC INQUIRY

- _____ Students will describe an observed scientific event, by using any of the following:
- _____ Sequencing processes or step
 - _____ Using measurable and describable attributes and units
- _____ Students will begin inquiry investigations about objects, events, and/or organisms to be tested by:
- _____ Asking pertinent questions
 - _____ Predicting conditions that can influence change
 - _____ Determining simple steps to follow to investigate selected questions
- _____ Students will conduct guided inquiry by
- _____ Modifying pictures or drawings that illustrate data
- _____ Students will analyze results of an investigation by
- _____ Organizing data on graphs or charts
 - _____ Students will communicate results of individual and group investigation by
 - _____ Matching similar data from other data sources
 - _____ Selecting data that can be used to predict future events

TECHNOLOGICAL DESIGN

- _____ Give ideas for solutions for technological design
- _____ Identify criteria for measuring design
- _____ Prioritize possible solutions from given list
- _____ Begin a design solution by
- _____ Choosing procedure steps for construction
 - _____ Suggest variables for testing criteria
- _____ Sketch final design
- _____ Construct the design
- _____ Test for design success with designed criteria
- _____ Give results
- _____ Evaluate design

This checklist is a suggested guideline.

_____ Make suggestions for 2nd round of design

_____ Evaluate again

LIVING THINGS

_____ Describe how plants and animals get energy

_____ Categorize animals by structures for food-getting and movement

_____ Categorize plants and animals by how they live and reproduce

_____ Identify factors that affect plant and animal growth and reproduction

_____ Match plant and animal adaptations with changing seasons or climate changes

_____ Examine how plants, animals (including humans) survive together in their ecosystems

_____ Identify local habitats

_____ Identify parasite/host relationships

MATTER AND ENERGY

_____ Demonstrate energy by constructing and testing simple electrical circuits with batteries

_____ Demonstrate how sound is produced by vibrating objects

_____ Analyze which energy sources power different objects

_____ **Compare** properties of matter *and* **Classify** objects or materials according to masses, volumes, temperatures, and states, or constants (such as texture, odor, magnetism, buoyancy)

FORCE AND MOTION

_____ Compare and contrast forces around us

_____ Dramatize the ways that forces cause action and reaction.

_____ Identify the work of simple machines.

_____ Identify the attraction/repulsion of magnets

_____ Sort natural or man-made forces

_____ Describe how gravity affects motion

_____ Demonstrate the rate, time and distance factors

This checklist is a suggested guideline.

_____ Describe examples of inertia and momentum in the classroom, playground and home

EARTH SCIENCE

_____ Describe the different types of and uses of Earth's rocks and minerals

_____ Identify major sources/locations of water on the planet

_____ Identify atmospheric features from photographs including satellites

_____ Identify erosion processes in various soil compositions

_____ Compare different water flow models for weathering impact or identify cycle in local conditions

_____ Examine various renewable and non-renewable resources comparing different paper, glass or plastic

SOLAR SYSTEM

_____ Identify the sizes, distances and relationships of the solar system

_____ Identify the Earth's dependence upon the sun for heat and light

_____ Identify reasons why people wanted to study the solar system

_____ Explain the seasonal motions of the Earth and other planets in relation to the Sun

SCIENCE, TECHNOLOGY, SAFETY AND SOCIETY

_____ Explain the dangers of electricity

_____ Explain basic safety instructions

_____ Devise ways to test student –generated projects

_____ Discuss hypotheses

_____ Correlate careers and science

_____ Describe the connections between science and transportation, medicine, agriculture, medicine, sanitation, etc.