

Montessori Physical Science Curriculum

Physical Science

Introduction – Concrete – Objects – Flashlight

Introduction – Abstract – Pictures – Flashlight

Matter

Introduction – 3 States of Matter

Liquid

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Activity – The Many Shapes of Water!

Solid

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Activity – The Frozen Balloon

Gas

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Activity – Steam in a Jar

Activity – Inflate a Balloon

Living

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Activity – Classroom Pet

Activity – Classroom Plant

Non-Living

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Activity – Sorting Rocks

Once Living

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Activity – Mini Fossil Dig

Vertebrates

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Activity – 3 Part Cards – Rabbit

Invertebrates

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Activity – 3 Part Cards – Starfish

Elasticity

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Activity – Rubber Stretch Bands

Plasticity

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Activity – Friendship Bracelets

Rigidity

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Activity – Sidewalk Chalk

Light – Shadows

Introduction – General

Activity – As the Earth Turns

Activity – Shadow Guessing Game

Light – Reflection

Introduction – General

Activity – Up Close and Personal

Activity – Bouncing Light

Light – Refraction

Introduction – General

Activity – The Bent Spoon

Activity – What Color is Light?

Activity – Over the Rainbow

Energy

Introduction – General

Light – Working as Energy

Introduction – General

Activity – Microscope - Bigger

Activity – Telescope – Closer

Activity – Periscope – Around Obstacles

Electricity – Working as Energy

Introduction – General

Activity – Making a Circuit

Activity – Makes Your Hair Stand-Up!

Activity – Stored-Up Energy Jump!

Magnets – Working as Energy

Introduction – General

Activity – Magnetic or Non-Magnetic?

Activity – Paper Clip Snake

Activity – Magnets at Work in Our Life

Air – Working as Energy

Introduction – General

Activity – Occupies Space – What Does Air Look Like?

Activity – Moving Air – Fan

Activity – Moving Air – Wind Chimes

Activity – Moving Air - Windmill

Activity – Air Pressure – Pumping-up a Tire

Activity – Air Pressure – Mashed Marshmallows

Activity – Dancing Ping Pong Balls

Activity – Air Power Racers

Activity – Personal Windsock

Water – Working as Energy

Introduction – General

Activity – What Shape Am I?

Activity – What do I Feel Like?

Activity – What do I Sound Like?

Activity – Downhill & Uphill Tubes

Activity – Making a Waterwheel

Activity – House of Plants

Moving Air and Water – Working as Energy

Introduction – General

Activity – Balloon Race

Activity – Water Ping Pong

Activity – Blue Celery

Activity – Duck, Duck, Squirt!

Sink and Float

Introduction – General

Activity – What Liquids Sink & Float?

Activity – What Solids Sink & Float?

Activity – Clay Boats

Sound

Introduction – General

Activity – Whisper

Activity – What do You Hear?

Activity – Musical Chairs

Activity – Sound Cylinders

Activity – Matching Sounds

Activity – Yogurt Phone

Activity – Rubber Band Guitar

Activity – Water Music (Vibration)

Activity – Tuning Fork (Length of Sound)

Activity – The Singing String

Activity – Hearing through Water

Activity – Ruler Twanging

Gravity

Introduction – General

Activity – What Goes Up, Must Come Down!

Activity – Race to the Ground!

Activity – Slip & Slide

Activity – Parachute Jump

Simple Machines

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Fiction

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Activity – Hot Hands

Activity – Wearing Away

Wedges

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Activity – Pounding Nails

Activity – Leather Work Bookmark

Levers

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Activity – Cutting-Up

Activity – Ruler See-Saw

Inclined Planes

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Activity – Moving Day!

Activity – Dump Trucks

Pulleys

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Activity – Hanging out to Dry

Activity – Up & Down Pulley

Wheels & Axles

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Activity – Wheel Racing

Activity – Egg Beater Bubbles

Screws

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Activity – Plastic Nuts and Bolts

Activity – Plastic Pipes

Machines as Everyday Tools

Introduction – Concrete – Objects

Introduction – Abstract – Pictures

Activity – Pencil Sharpening

Activity – Grinding Rock Salt