

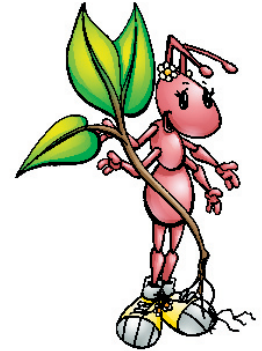
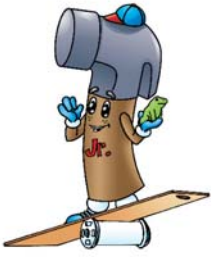


***“Uncommonly Sensible Science”***  
***K – 8<sup>th</sup> Grade course offerings***  
***Summer, 2009***

***Register through Seela Science***  
***800-232-5861***

| <b><u>Date</u></b> | <b><u>Level</u></b>              | <b><u>Course Title</u></b>          | <b><u>Location</u></b>   | <b><u>Credit</u></b> |
|--------------------|----------------------------------|-------------------------------------|--------------------------|----------------------|
| June 8             | K-3 <sup>rd</sup>                | Ants, Plants, Puppy Dog Toes        | NWMSU                    | 1, 2                 |
| June 8             | 4 <sup>th</sup> -8 <sup>th</sup> | Have Forces, Will Travel            | NWMSU                    | 1, 2                 |
| June 9             | K-3 <sup>rd</sup>                | Science for Beginning Einsteins     | NWMSU                    | 1, 2                 |
| June 9             | 4 <sup>th</sup> -8 <sup>th</sup> | Everyday Waves                      | NWMSU                    | 1, 2                 |
| June 10            | K-3 <sup>rd</sup>                | Everyday Science Stuff Around Us    | NWMSU                    | 1, 2                 |
| June 10            | 4 <sup>th</sup> -8 <sup>th</sup> | Body Shop                           | NWMSU                    | 1, 2                 |
| June 11            | K-3 <sup>rd</sup>                | Earth & Sky Secrets for Young Minds | NWMSU                    | 1, 2                 |
| June 11            | 4 <sup>th</sup> -8 <sup>th</sup> | Earth's Dirty Little Secrets        | NWMSU                    | 1, 2                 |
| June 12            | 4 <sup>th</sup> -8 <sup>th</sup> | Plants Inside and Out               | NWMSU                    | 1, 2                 |
| June 15            | 4 <sup>th</sup> -8 <sup>th</sup> | Body Shop                           | ESU#4, Auburn, NE        |                      |
| June 17            | K-3 <sup>rd</sup>                | Ants, Plants, Puppy Dog Toes        | NDSU                     | 1, 2                 |
| June 17            | 4 <sup>th</sup> -8 <sup>th</sup> | Body Shop                           | NDSU                     | 1, 2                 |
| June 18            | K-3 <sup>rd</sup>                | Science for Beginning Einsteins     | NDSU                     | 1, 2                 |
| June 18            | 4 <sup>th</sup> -8 <sup>th</sup> | Have Forces, Will Travel            | NDSU                     | 1, 2                 |
| June 19            | K-3 <sup>rd</sup>                | Earth & Sky Secrets for Young Minds | NDSU                     | 1, 2                 |
| June 19            | 4 <sup>th</sup> -8 <sup>th</sup> | Earth's Dirty Little Secrets        | NDSU                     | 1, 2                 |
| June 30            | 4 <sup>th</sup> -8 <sup>th</sup> | Earth's Dirty Little Secrets        | Friends Un<br>Topeka, KS | 1                    |
| July 1             | 4 <sup>th</sup> -8 <sup>th</sup> | Have Forces, Will Travel            | Friends Un<br>Lenexa, KS | 1                    |
| July 27            | K-3 <sup>rd</sup>                | Earth & Sky Secrets for Young Minds | Morningside              | 1, 2                 |
| July 27            | 4 <sup>th</sup> -8 <sup>th</sup> | Earth's Dirty Little Secrets        | Morningside              | 1, 2                 |
| July 28            | K-3 <sup>rd</sup>                | Science for Beginning Einsteins     | Morningside              | 1, 2                 |
| July 28            | 4 <sup>th</sup> -8 <sup>th</sup> | Have Forces, Will Travel            | Morningside              | 1, 2                 |
| July 29            | K-3 <sup>rd</sup>                | Everyday Science Stuff Around Us    | Morningside              | 1, 2                 |
| July 29            | 4 <sup>th</sup> -8 <sup>th</sup> | Everyday Waves                      | Morningside              | 1, 2                 |
| July 30            | K-3 <sup>rd</sup>                | Ants, Plants, Puppy Dog Toes        | Morningside              | 1, 2                 |

|         |                                  |                       |             |      |
|---------|----------------------------------|-----------------------|-------------|------|
| July 30 | 4 <sup>th</sup> -8 <sup>th</sup> | Body Shop             | Morningside | 1, 2 |
| July 31 | 4 <sup>th</sup> -8 <sup>th</sup> | Plants Inside and Out | Morningside | 1, 2 |



## ***Primary Level (K – 3<sup>rd</sup>)***

### **1) Ants, Plants and Puppy Dog Toes -- (life science)**

*Life cycles of organisms* -- (life cycle of the moth, life cycle of a chicken, life cycle of plants, seed dispersal)

*Organisms and their environment* -- (habitat differences, camouflage, impact of humans on environment, pollutants, adaptations to environments)

*Characteristics of organisms* -- (animal parts, plant parts, camouflage, classification, basic needs)

### **2) Science for Beginning Einsteins - (physical science)**

*Properties of objects and materials* -- (recycling, environment, changing states of matter, chemical/physical change, density, surface tension, physical properties -- rough/smooth, hard/soft, light/heavy)

*Position and motion of objects* -- (flight, action/reaction, simple machines, sound, vibration, push/pull, amount of force affects the motion, directions -- up/down, left/right, forward/backward)

### **3) Everyday Science Stuff Around Us - (physical science)**

Same concepts as "Science for Beginning Einsteins", but different activities. Slightly more advanced.

### **4) Earth and Sky Secrets for Young Minds - (earth science)**

*Objects in the sky* -- (eclipses, solar energy creates heat, solar system, stars)

*Changes in the Earth and sky* -- (day/night, moon phases, seasons, weather, weather instruments, extreme changes in the weather - hurricanes, blizzards, tornadoes, changes in the earth's surface - volcano, erosion)

*Earth materials and fossils* -- (fossils, natural or man-made, earth resources, soil components)



## ***Intermediate Level (4<sup>th</sup> – 8<sup>th</sup>)***

### **1) Have Forces, Will Travel - (physical science)**

*force and motion: energy conversion and transfer, Newton's Laws, torque, center of gravity, centripetal force*

### **2) Everyday Waves - (physical science)**

*light, heat, and sound waves*

### **3) Body Shop - (life science)**

*body structure: body materials and processes, body structures (complex eye, ear, nerve cells, vertebrae, ball and socket joint), cells and cell processes, classification/characteristics of animals*

### **4) Earth's Dirty Little Secrets - (earth science)**

*earth structure/processes/materials: plate tectonics, earthquakes and earthquake monitoring, volcanoes and volcanic effects, oceans and surface water, glaciers and groundwater, soil, erosion forms and resources*

### **5) Plants Inside and Out - (life science)**

*plant structure/function: plant structures, seeds and germination, plant functions, plant uses, classification*

## ***Fees:***

NWMSU, Maryville, MO

\$175 per course payable the day of class to Seela Science

\$75 per credit hour billed out by NWMSU at the completion of the course

NDSU, Fargo, ND

\$165 per course payable the day of class to Seela Science

\$ 50 per credit hour at the completion of the course, payable to NDSU

Friends University, Topeka and Lenexa, KS

\$165 per course payable the day of class to Seela Science

\$ 80 per credit hour at the completion of the course, payable to Friends Univ.

Morningside College, Sioux City, IA

1 credit: \$165 payable the day of class to Seela Science, \$40 payable to Morningside

2 credits: \$185 payable the day of class to Seela Science, \$80 payable to Morningside

