## Inquiry Project: Grade 4 Curriculum Materials Kit List

(assume class of 24 students in 6 groups)

| Qty | Item | Description | Details |
| :---: | :---: | :---: | :---: |
|  | Earth Materials |  |  |
| 1 liter | pebbles | dry washed pebbles | 8 to 16 mm |
| 1 liter | gravel | dry washed medium gravel | 2 to 4 mm |
| 1 liter | sand | dry washed fine sand | $1 / 8$ to $1 / 4 \mathrm{~mm}$ |
| 1 liter | top soil/organic material | label organic soil | black organic soil or top soil |
| 600g | shells | small, thin, easily crushed | eg. clam, scallop shells (it is important that they can be easily crushed) |
| 1/2 liter | clay | dry gray powder |  |
| $1 / 2$ liter | mineral oil |  | Light mineral oil (CVS brand works well) |
|  | Rocks |  |  |
| 6 | sandstone | size $=3-4 \mathrm{~cm}$ |  |
| 6 | conglomerate | size $=3-4 \mathrm{~cm}$ |  |
| 6 | basalt | size $=3-4 \mathrm{~cm}$ |  |
| 6 | granite | size $=3-4 \mathrm{~cm}$ |  |
|  | Minerals |  |  |
| 6 | quartz | size $=3-4 \mathrm{~cm}$ |  |
| 6 | graphite | size $=3-4 \mathrm{~cm}$ |  |
| 6 | mica | size $=3-4 \mathrm{~cm}$ |  |
| 6 | biotite | size $=3-4 \mathrm{~cm}$ |  |
| 6 | feldspar | size $=3-4 \mathrm{~cm}$ |  |
| 6 | halite | size $=3-4 \mathrm{~cm}$ |  |
| 6 | hematite | size $=3-4 \mathrm{~cm}$ |  |
| 6 | talc | size $=3-4 \mathrm{~cm}$ |  |
|  | Density Cubes |  |  |
| 6 | aluminum | $1^{\prime \prime} \times 1^{\prime \prime} \times 1$ ' cube | Available from Science First (www.sciencefirst.com) as part of density cube set, part \#611-2020 |
| 6 | copper | $1^{\prime \prime} \times 1^{\prime \prime} \times 1^{\prime \prime}$ cube | Available from Science First (www.sciencefirst.com) as part of density cube set, part \#611-2020 |
|  | Other Materials |  |  |
| 2 lbs | plastic modeling clay | non-drying, non-toxic; tan or light color |  |
| 125 | cylindrical containers | clear plastic; cylindrical with cover; approx. 5 cm diam. x 9 cm tall; capacity - approx. 150ml | Thornton Plastic Co; www.thorntonplastics.com 40 dram plastic vials with caps |


| 6 | rectangular container | clear plastic rectangular; approx. $12 \mathrm{~cm} \times 12 \mathrm{~cm} \times 5 \mathrm{~cm}$ tall; no cover | Area of the base should be approx. $144 \mathrm{~cm}^{2}$ |
| :---: | :---: | :---: | :---: |
| 6 | rectangular container | ```clear plastic rectangular; approx. \(71 / 2 \mathrm{~cm} \mathrm{x} 11 \mathrm{~cm} \times 51 / 2 \mathrm{~cm}\) tall; no cover``` | Area of the base should be approx. $80 \mathrm{~cm}^{2}$ |
| 24 | clear plastic boxes | plastic box; <br> fits 20 cc ( 20 plastic cc cubes) ideally $4 \mathrm{~cm} \times 5 \mathrm{~cm} \times 1 \mathrm{~cm}$ | Gary Plastic Packaging Corp.; www.plasticboxes.com; Part \#G315 Or alternative since this is not perfect |
| 14 | 50 ml graduated cylinder |  | Kartell 50 ml graduated cylinder (code 1078) is recommended |
| 1 | 100 ml graduated cylinder |  | Kartell 100 ml graduated cylinder (code 1079) is recommended |
| 1 | measure line | TERC measure line | NumberLineBanner.pdf (the file includes printing instructions) |
| 500 | cubes | $\begin{aligned} & 1 \mathrm{~cm} \times 1 \mathrm{~cm} \times 1 \mathrm{~cm} \text { cubes; } \\ & \text { weight }=1 \mathrm{~g} ; \\ & \text { plastic, non-interlocking } \\ & \hline \end{aligned}$ |  |
| 12 | plastic pipettes | polyethylene squeeze bulb; approx 145 mm long; tip diameter $=3 \mathrm{~mm}$; capacity $=2 \mathrm{ml}$ |  |
| 25 | magnifiers | plastic magnifier; approx 11 cm long; <br> 2 magnifying areas (3X, 6X) | Sargent-Welch economy dual magnifier |
| 1 roll | adding machine tape | paper adding machine tape; approx 2" wide |  |
| 1 | blue food coloring | approx 10cc |  |
| 30 | cups | clear plastic; capacity $=20 \mathrm{oz}$ or larger |  |
| 60 | cups | 3oz, clear plastic |  |
| 60 | plates | heavy duty; white; plastic dinner size |  |
| 30 | forks | heavy duty plastic |  |
| 30 | spoons | heavy duty plastic |  |
| 8 | trays | plastic; <br> approx $10^{\prime \prime} \times 121 / 2^{\prime \prime}$ |  |
| 1 box | sandwich bags | box of 50 fold-top plastic sandwich bags |  |
| 6 | scales | digital scale | Escali Primo digital multifunctional scale model P115C |
| 1 | eraser | plastic eraser | Staedtler Mars plastic eraser |
| 1 | pitcher | plastic; capacity $=2 \mathrm{qt}$ |  |


| 1 | strainer | approx 5-6" diameter | Holds $1 / 8-1 / 4 \mathrm{~mm}$ granular material |
| :--- | :--- | :--- | :--- |
| 1 | roll | heavy duty aluminum foil; <br> $25^{\prime}$ | Rock/Mineral Reference Sheets |
| 12 | reference sheets | 4C_Rock_Mineral_Reference.pdf <br> Color print and place in plastic sleeve or <br> laminate. <br> The pdf file is also available as part of the <br> grade 4 curriculum on the Inquiry Project <br> website (inquiryproject.terc.edu) |  |

## Supplies from the classroom:

- paper towels
- clear plastic tape
- masking tape
- 6-8 black fine tip permanent markers
- index cards


## Replacement kit:

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| 1 liter | sand | dry washed fine sand | $1 / 8$ to $1 / 4 \mathrm{~mm}$ |  |
| 1 liter | top soil/organic <br> material | label organic soil | black organic soil or top soil |  |
| 600 g | shells | small, thin, easily crushed | eg. clam, scallop shells (it is important that <br> they can be easily crushed) |  |
| $1 / 2$ liter | clay | dry gray powder | Light mineral oil (CVS brand works well) |  |
| $1 / 2$ liter | mineral oil |  |  |  |
|  | Other Materials |  |  |  |
| 2 lbs | plastic modeling <br> clay | non-drying, non-toxic; <br> tan or light color | heavy duty; white; plastic <br> dinner size |  |
| 60 | plates |  |  |  |
| 1 roll | adding machine <br> tape | paper adding machine tape; <br> approx $2^{\prime \prime}$ wide | box of 50 fold-top plastic <br> sandwich bags |  |
| 1 box | sandwich bags |  |  |  |

