Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_

**10.5A Reading Scientific Notation\_Classwork**

*Objective: Write numbers in standard form from scientific notation.*

*Explain whether numbers are expressed in scientific notation (pre-requisite to 8.EE.4)*

*HW: (10.5) p. 440 #6 – 11, 15 – 20 (Solutions on p. A40)*

Show: [**https://www.youtube.com/watch?v=Dme-G4rc6NI**](https://www.youtube.com/watch?v=Dme-G4rc6NI)

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| What is the purpose of scientific notation? Where do you see it? Why do we use it? |

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| What does scientific notation look like? |

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| --- | --- |
| 2 EXAMPLES OF SCIENTIFIC NOTATION | 2 NON-EXAMPLES OF SCIENTIFIC NOTATION |

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| DEFINITION OF SCIENTIFIC NOTATION  The product of a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and a power of \_\_\_\_\_\_\_. The factor must be \_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_ to 1 and \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ 10. |

EXAMPLES FROM VIDEO (start at 9:15)

|  |  |
| --- | --- |
| 1. 7.921 x 108 | 1. 8.2 x 10-5 |
| 1. 4.13 x 103 | 1. 5.2216 x 10-9 |



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| 1. Is 12 x 104 written in scientific notation? Explain. |

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| WRITING NUMBERS IN STANDARD FORM (FROM SCIENTIFIC NOTATION)  If the exponent is NEGATIVE, move the decimal point to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  If the exponent is POSITIVE, move the decimal point to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |

WRITE THE NUMBER IN STANDARD FORM

|  |  |  |
| --- | --- | --- |
| 1. 6 x 107 | 1. 9.9 x 10-5 | 1. 1.285 x 104 |