

INSTRUKCJA I KARTA PRACY

WSZYSTKIE DOŚWIADCZENIA UCZNIOWIE WYKONUJĄ W ZESPÓŁACH DWUOSOBOWYCH.

ZACHOWUJEMY SZCZEGÓLNA OSTROŻNOŚĆ !**TEMAT: ENGLISH SCIENCE – CHEMICAL REACTION****Preteching:**

1. Name of chemical elements (<http://www.ptable.com/>) – periodic tables of elements:

Los Alamos National Laboratory Chemistry Division

Periodic Table of the Elements

1A 1 H hydrogen 1.008																	8A 2 He helium 4.003	
3 Li lithium 6.94	4 Be beryllium 9.012																	10 Ne neon 20.18
11 Na sodium 22.99	12 Mg magnesium 24.31																	18 Ar argon 39.95
19 K potassium 39.10	20 Ca calcium 40.08	21 Sc scandium 44.96	22 Ti titanium 47.88	23 V vanadium 50.94	24 Cr chromium 52.00	25 Mn manganese 54.94	26 Fe iron 55.85	27 Co cobalt 58.93	28 Ni nickel 58.69	29 Cu copper 63.55	30 Zn zinc 65.39	31 Ga gallium 69.72	32 Ge germanium 72.64	33 As arsenic 74.92	34 Se selenium 78.96	35 Br bromine 79.90	36 Kr krypton 83.79	
37 Rb rubidium 85.47	38 Sr strontium 87.62	39 Y yttrium 88.91	40 Zr zirconium 91.22	41 Nb niobium 92.91	42 Mo molybdenum 95.96	43 Tc technetium (98)	44 Ru ruthenium 101.1	45 Rh rhodium 102.9	46 Pd palladium 106.4	47 Ag silver 107.9	48 Cd cadmium 112.4	49 In indium 114.8	50 Sn tin 118.7	51 Sb antimony 121.8	52 Te tellurium 127.6	53 I iodine 126.9	54 Xe xenon 131.3	
55 Cs cesium 132.9	56 Ba barium 137.3	*	72 Hf hafnium 178.5	73 Ta tantalum 180.9	74 W tungsten 183.9	75 Re rhenium 186.2	76 Os osmium 190.2	77 Ir iridium 192.2	78 Pt platinum 195.1	79 Au gold 197.0	80 Hg mercury 200.5	81 Tl thallium 204.4	82 Pb lead 207.2	83 Bi bismuth 209.0	84 Po polonium (209)	85 At astatine (210)	86 Rn radon (222)	
87 Fr francium (223)	88 Ra radium (226)	**	104 Rf rutherfordium (261)	105 Db dubnium (262)	106 Sg seaborgium (263)	107 Bh bohrium (264)	108 Hs hassium (277)	109 Mt meitnerium (276)	110 Ds darmstadtium (281)	111 Rg roentgenium (280)	112 Cn copernicium (285)	113 Uut (284)	114 Fl flerovium (289)	115 Uup (288)	116 Lv livermorium (293)	117 Uus (294)	118 Uuo (294)	
Lanthanide Series*		57 La lanthanum 138.9	58 Ce cerium 140.1	59 Pr praseodymium 140.9	60 Nd neodymium 144.2	61 Pm promethium (145)	62 Sm samarium 150.4	63 Eu europium 152.0	64 Gd gadolinium 157.2	65 Tb terbium 158.9	66 Dy dysprosium 162.5	67 Ho holmium 164.9	68 Er erbium 167.3	69 Tm thulium 168.9	70 Yb ytterbium 173.0	71 Lu lutetium 175.0		
Actinide Series**		89 Ac actinium (227)	90 Th thorium 232	91 Pa protactinium 231	92 U uranium 238	93 Np neptunium (237)	94 Pu plutonium (244)	95 Am americium (243)	96 Cm curium (247)	97 Bk berkelium (247)	98 Cf californium (251)	99 Es einsteinium (252)	100 Fm fermium (257)	101 Md mendelevium (258)	102 No nobelium (259)	103 Lr lawrencium (262)		



element names in **blue** are liquids at room temperature
 element names in **red** are gases at room temperature
 element names in **black** are solids at room temperature

2. Vocabulary:

flask-kolba
 glassy stick- bagietka
 test tube-probówka
 acetylene burner – palnik acetylenowy
 reagent – reagent
 substrate – substrat
 product – produkt

funnel – lejek
beaker – zlewka
pipette - pipeta

Follow experiments as instructed.

- 1. Oxidation of 2.4 g of magnesium formed 4g magnesium oxide. How many grams of oxygen used up in the reaction?**

Calculation:

Reaction:.....

Experiment: The appropriate quantity of magnesium put on the film and warmed over the burner.

Draft of the Experiment:

Scientific observations:

Final findings (name the substrates and product):

2. Was mixed 1.4 g of aluminum with sulfur, then the mixture was heated. How many grams of product was obtained in the chemical reaction.

Calculation:

Reaction:.....

Experiment: The appropriate quantity of aluminum put on the film and warmed over the burner.

Draft of the Experiment:

Scientific observations:

Final findings (name the substrates and product):