## **Nuclear decay equations 3**



Education in Chemistry March 2018 rsc.li/EiC218-thehuntison

This worksheet accompanies the above article 'The hunt is on'.

Complete the equations by adding in the type of decay, the isotope undergoing decay and/or the products. Each equation has one or more parts missing.

	Type of decay					
1		<sup>40</sup> <sub>19</sub> K	<b></b>	<sup>40</sup> <sub>20</sub> Ca	+	
2			-	<sup>206</sup> <sub>84</sub> Po	+	4 <i>Не</i>
3	а	$^{230}_{90}Th$			+	<sup>4</sup> Не
4				<sup>234</sup> Pa	+	$_{-1}^{0}e$
5	а	<sup>10</sup> <sub>4</sub> Be				
6		<sup>8</sup> <sub>4</sub> Be		$^8_5B$	+	$_{-1}^{0}e$
7	β	<sup>79</sup> <sub>34</sub> Se				
8	а			<sup>206</sup> <sub>82</sub> Pb	+	
9		<sup>85</sup> <sub>36</sub> Kr		<sup>85</sup> <sub>37</sub> Rb	+	
10	β	<sup>90</sup> <sub>38</sub> Sr				
11				<sup>234</sup> <sub>86</sub> Rn	+	4 <i>Не</i>
12	а			<sup>234</sup> <sub>92</sub> U	+	4 <sub>2</sub> Не
13	β	<sup>125</sup> <sub>38</sub> Sb				
14	а	<sup>242</sup> <sub>96</sub> Cm				
15	а	<sup>209</sup> <sub>83</sub> Bi			+	4 <i>Не</i>