

ENERGIA DIRETTA

Radiazione EM

MICROONDE

LASER

Energia Acustica

Flusso di Particelle

PLASMA

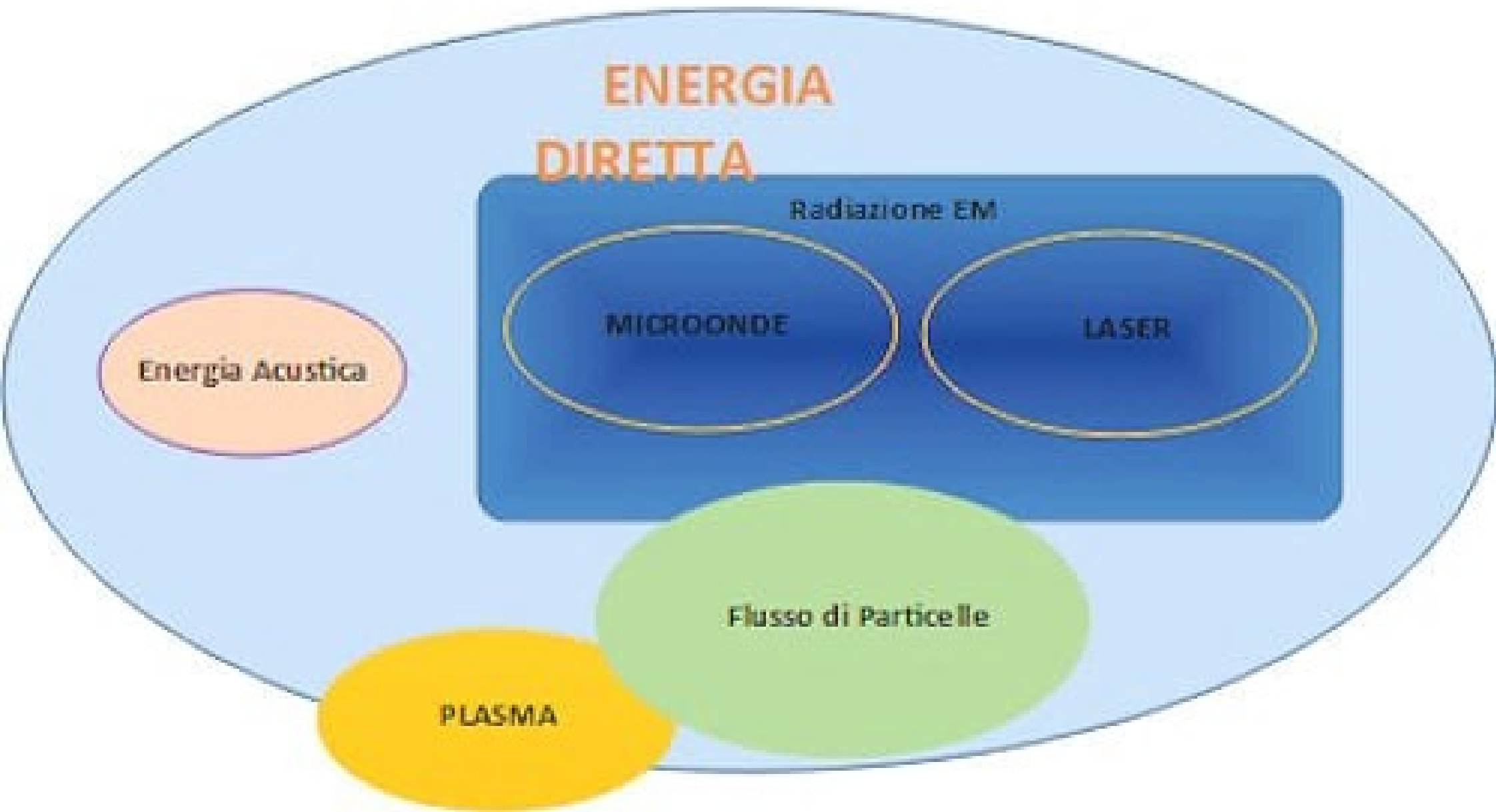
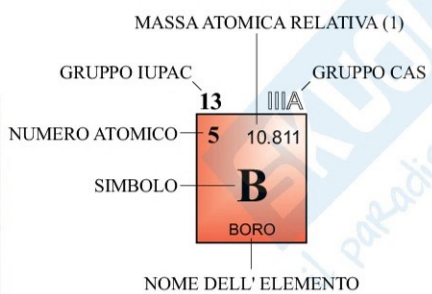


TAVOLA PERIODICA DEGLI ELEMENTI

<http://www.ktf-split.hr/periodni/it/>

GRUPPO	1	IA										18	VIIIA																							
PERIODO	1											2	4.0026																							
1	1											2	4.0026																							
2	3	4											5	10.811	6	12.011	7	14.007	8	15.999	9	18.998	10	20.180												
3	11	12	13											14	28.086	15	30.974	16	32.065	17	35.453	18	39.948													
4	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
5	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57-71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86
6	55	56	57-71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89-103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118
7	87	88	89-103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136



MASSA ATOMICA RELATIVA (1)

GRUPPO IUPAC GRUPPO CAS

NUMERO ATOMICO

SIMBOLO

NOME DELL' ELEMENTO

- Metalli
- Metalli alcalini
- Metalli alcalino terrosi
- Metalli di transizione
- Lantanidi
- Attinidi
- Semimetali
- Non metalli
- Calcogeni
- Alogeni
- Gas nobili

STATO DI AGGREGAZIONE A 100 °C

Ne - gas Fe - solido

Ga - liquido Tc - artificiali

LANTANIDI

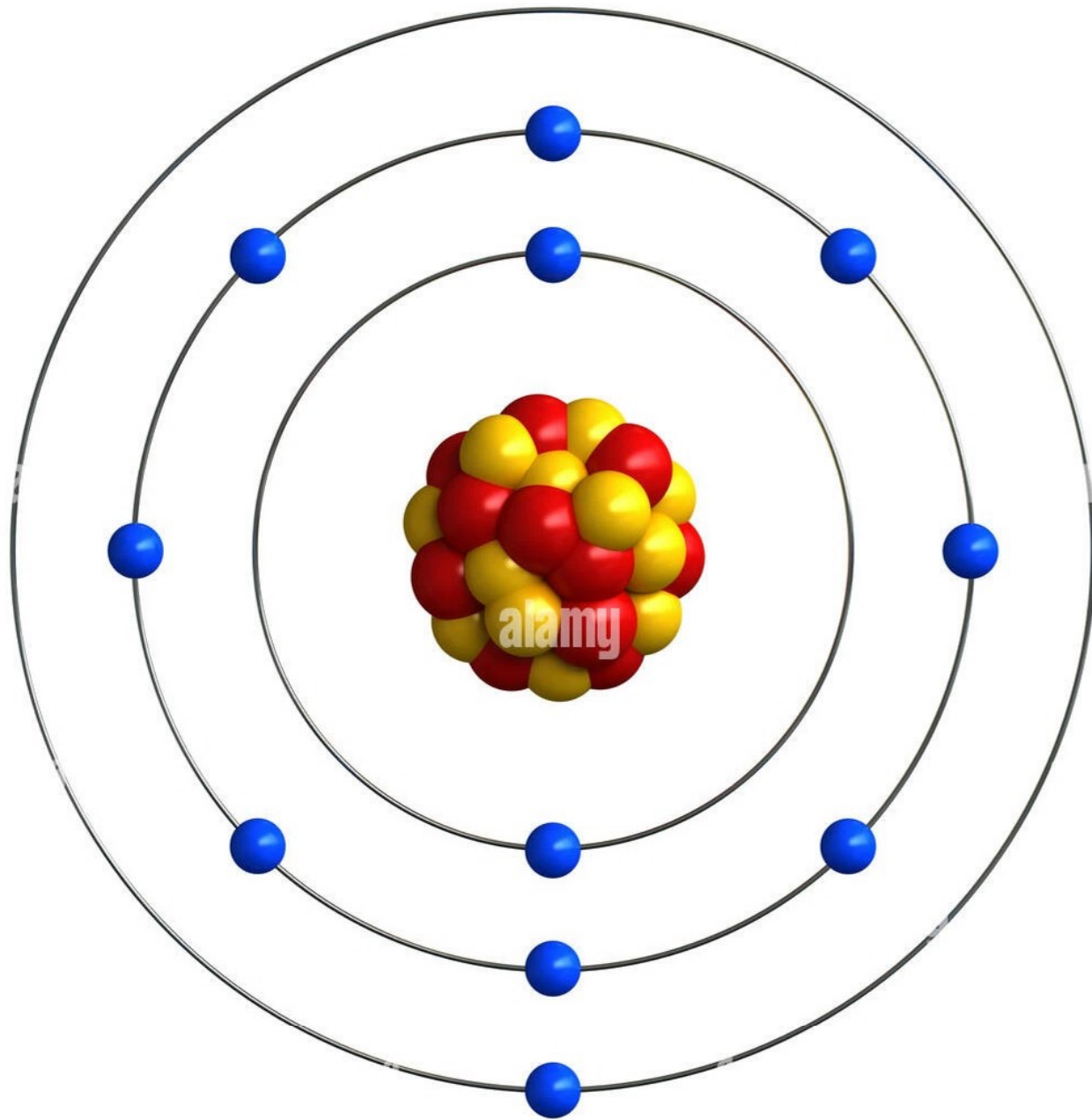
57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
LANTANIO	CERIO	PRASEODIMIO	NEODIMIO	PROMETIO	SAMARIO	EUROPIO	GADOLINIO	TERBIO	DISPROSIO	OLMIO	ERBIO	TULIO	ITTERBIO	LUTEZIO

ATTINIDI

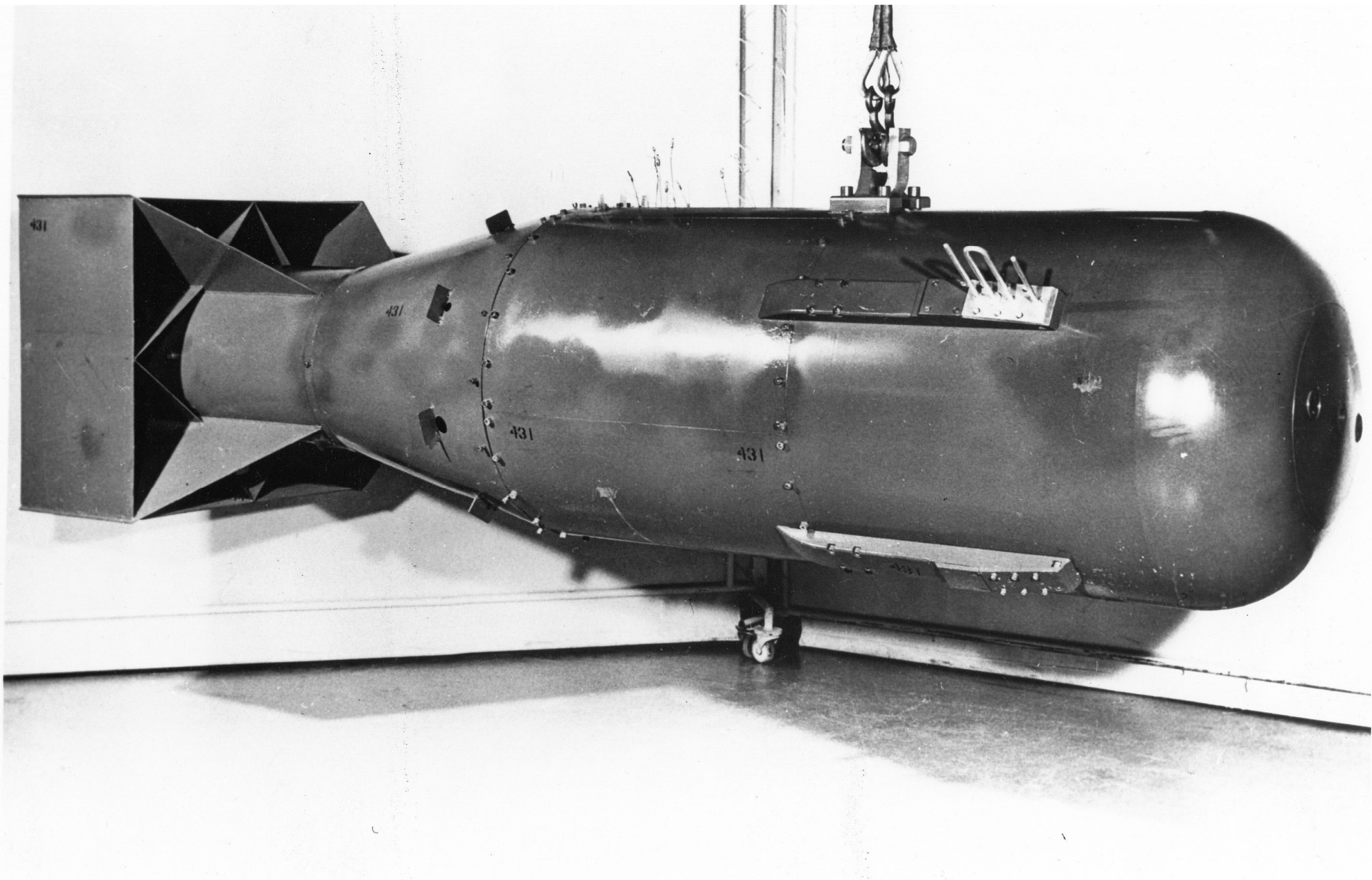
89	90	91	92	93	94	95	96	97	98	99	100	101	102	103
Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr
ATTINIO	TORIO	PROTOATTINIO	URANIO	NETTUNIO	PLUTONIO	AMERICIO	CURIO	BERKELIO	CALIFORNIO	EINSTEINIO	FERMIO	MENDELEVIO	NOBELIO	LAWRENTIO

(1) Pure Appl. Chem., 73, No. 4, 667-683 (2001)
 Relative atomic mass is shown with five significant figures. For elements have no stable nuclides, the value enclosed in brackets indicates the mass number of the longest-lived isotope of the element.
 However three such elements (Th, Pa, and U) do have a characteristic terrestrial isotopic composition, and for these an atomic weight is tabulated.

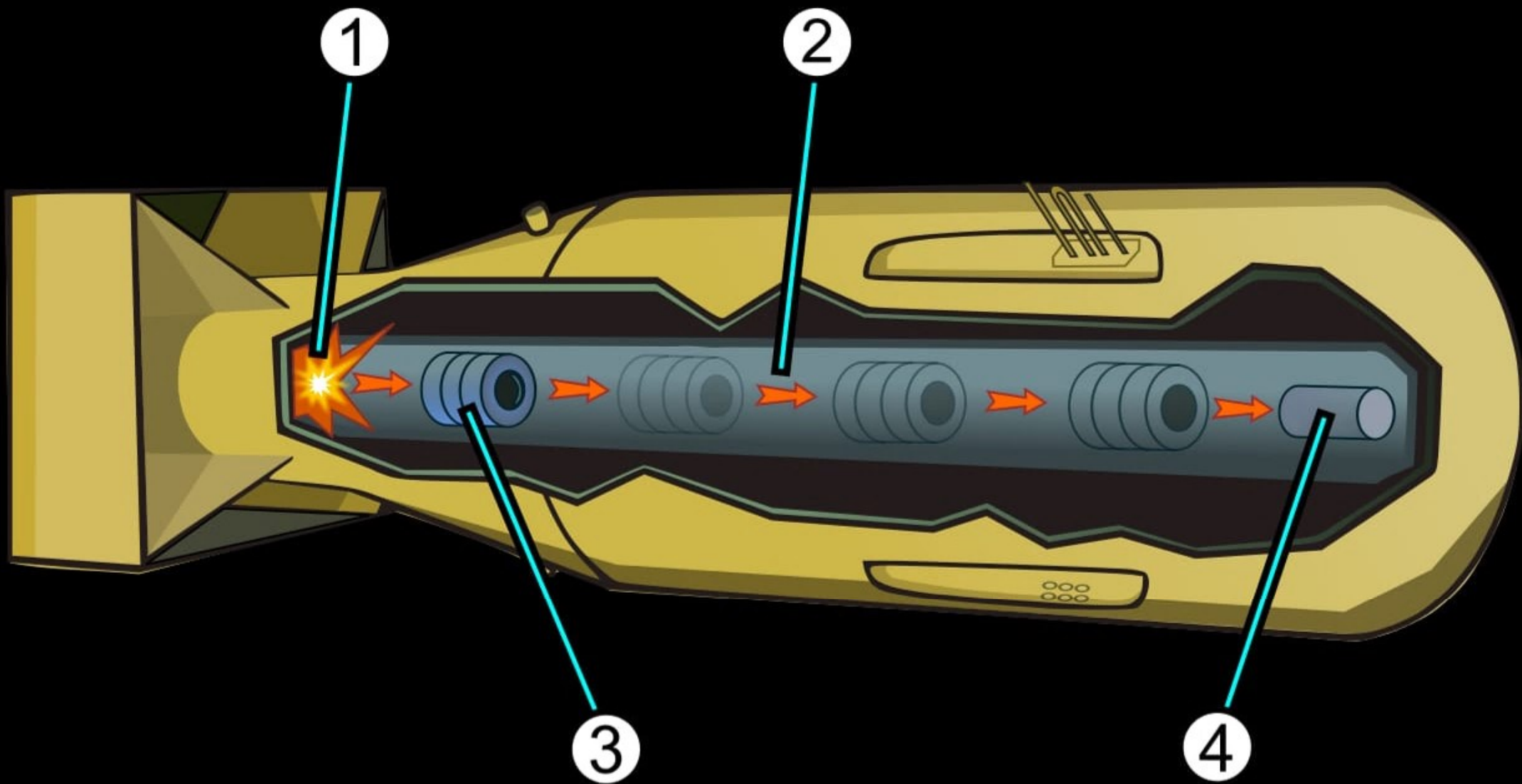




 **11 Protons**  **12 Neutrons**  **11 Electrons**







NEUTRON BOMB: AN EXPLOSIVE ISSUE

By Wayne Biddle

Four years ago, the United States triggered a controversy in Europe over its plans to build neutron bombs. In April 1978, Ronald Reagan, then a future Presidential candidate, stepped into the fray. He declared that the new bomb was "the first weapon that's come along in a long time that could easily and economically alter the balance of power. It could be the ideal deterrent." President Carter eventu-

Wayne Biddle writes frequently about science and public issues.

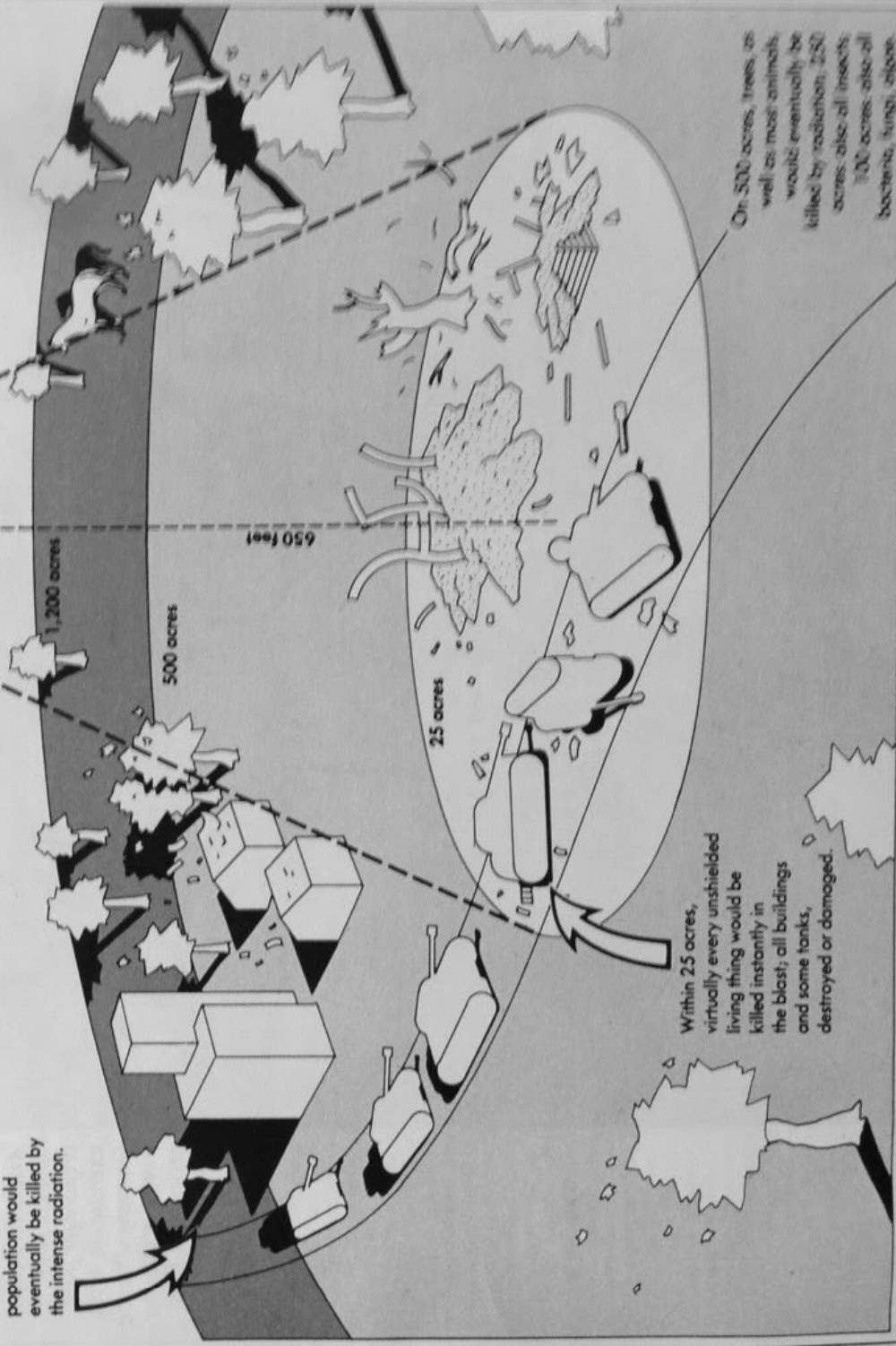
ally set the plan aside, but last summer the Reagan Administration decided to go ahead with it. This move raises yet again the problem — and with it the heated, emotional controversy and debate — of how to defend Europe in the atomic age without destroying it.

Was Mr. Reagan right in 1978 when he placed such high hopes on the neutron bomb? And is he still right today? The crux of the neutron-bomb issue is whether the production and deployment of this weapon will somehow push us closer to the threshold between war posturing and war fighting, or pull us back to a position of greater strength and increased deterrence. Resolving

the issue requires answering difficult questions: What do neutron weapons add to the West's existing arsenal? How do military commanders foresee using them? How do the weapons fit into the politics that link Americans with Europeans?

Today, the most common rationale for building neutron bombs is to counter the Warsaw Pact nations' huge tank armadas in Europe. Behind the East German frontier, which would look a lot like Wisconsin if the watchtowers and barbed wire were removed, sit 18,700 Soviet tanks in various states of readiness. Ready for what? Some could conceivably be intended for possible internal use within Eastern Europe; some might be for psychological effect. In an area of the world where military confrontation is largely symbolic, it is hard to know what these tanks really mean, what danger they really pose. (Continued on Page 50)

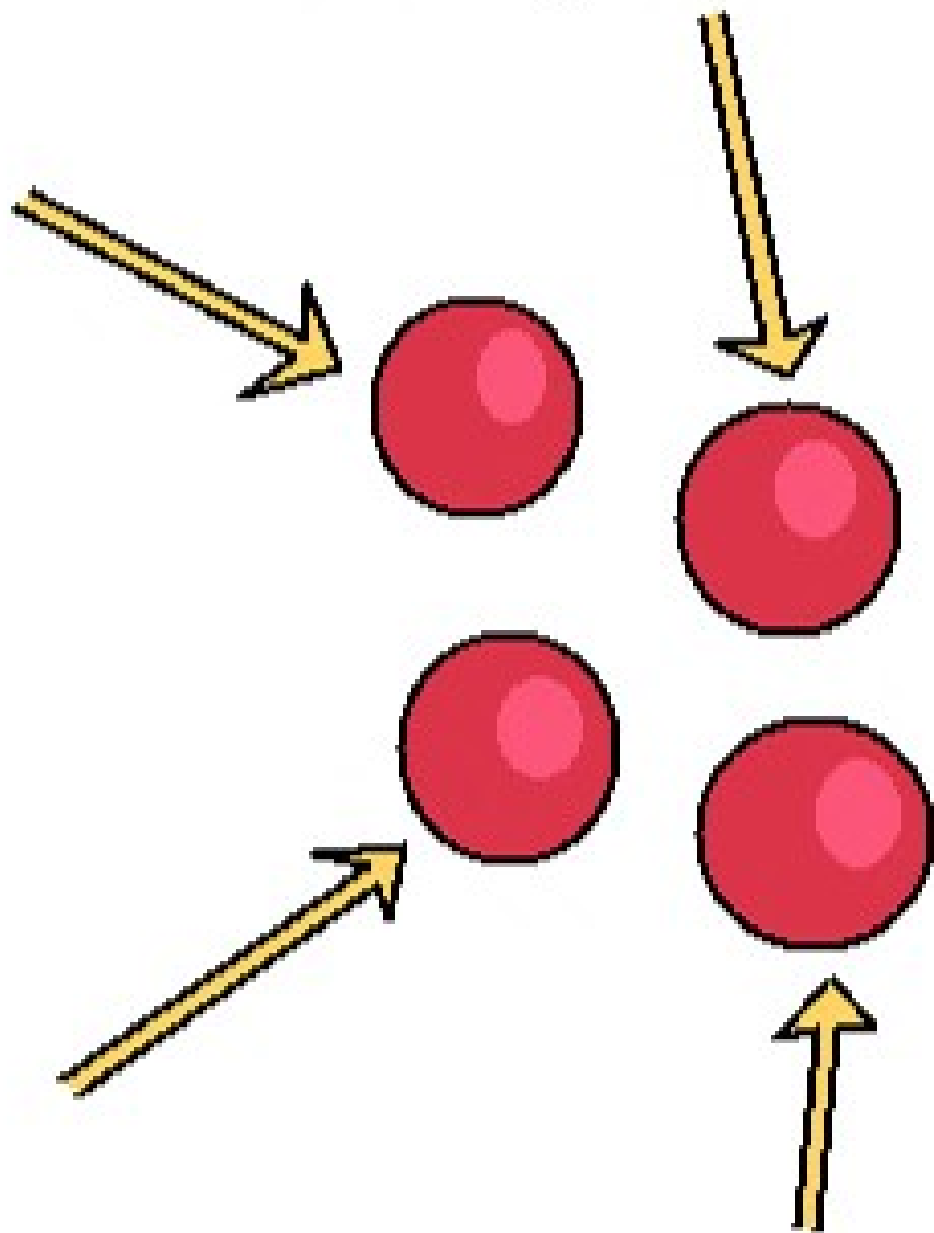
Within 1,200 acres, half the animal population would eventually be killed by the intense radiation.



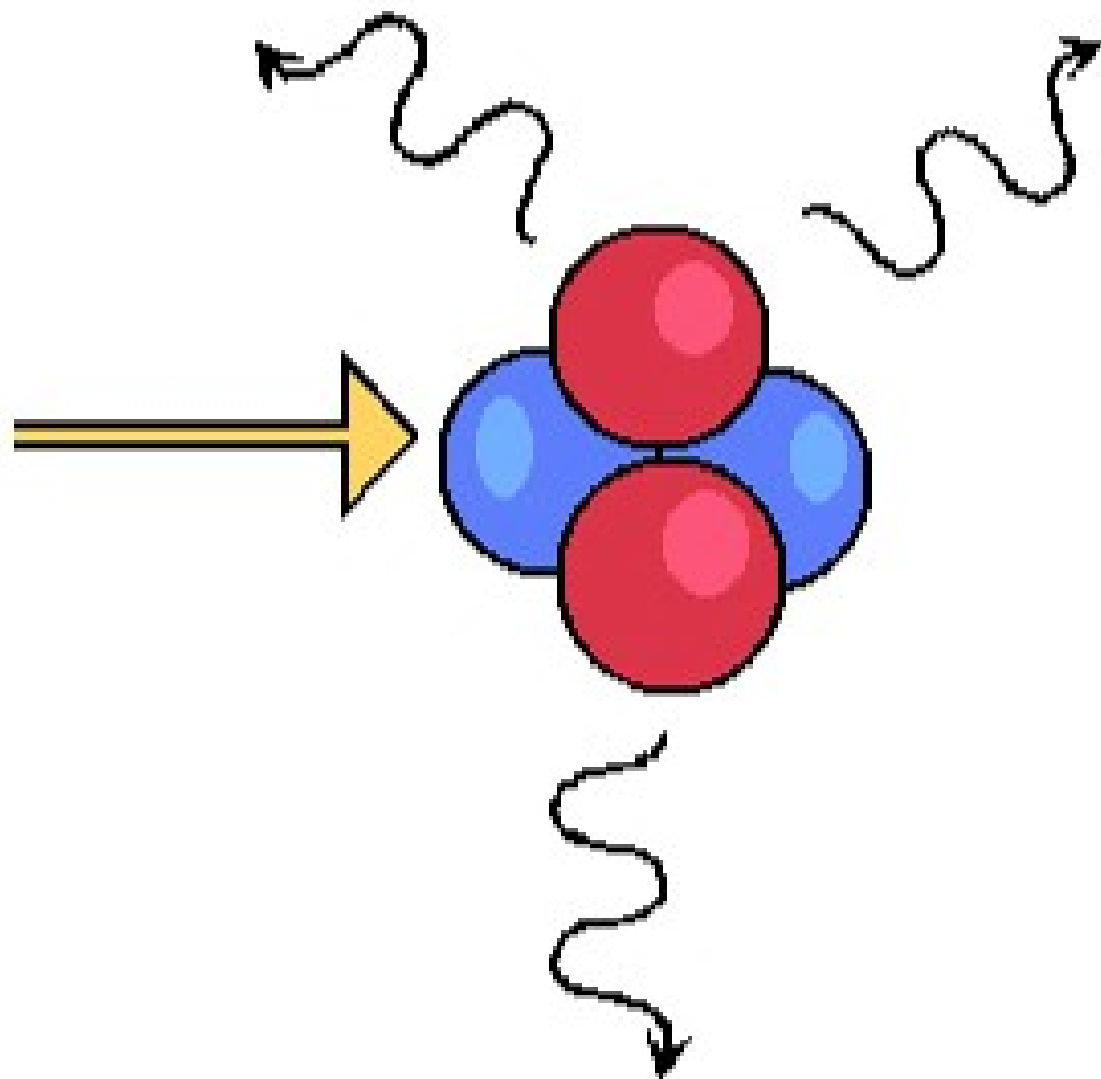
Within 25 acres, virtually every unshielded living thing would be killed instantly in the blast; all buildings and some tanks, destroyed or damaged.

On 500 acres, trees as well as most animals would eventually be killed by radiation; 250 acres, also, all insects, bacteria, fungi, algae.

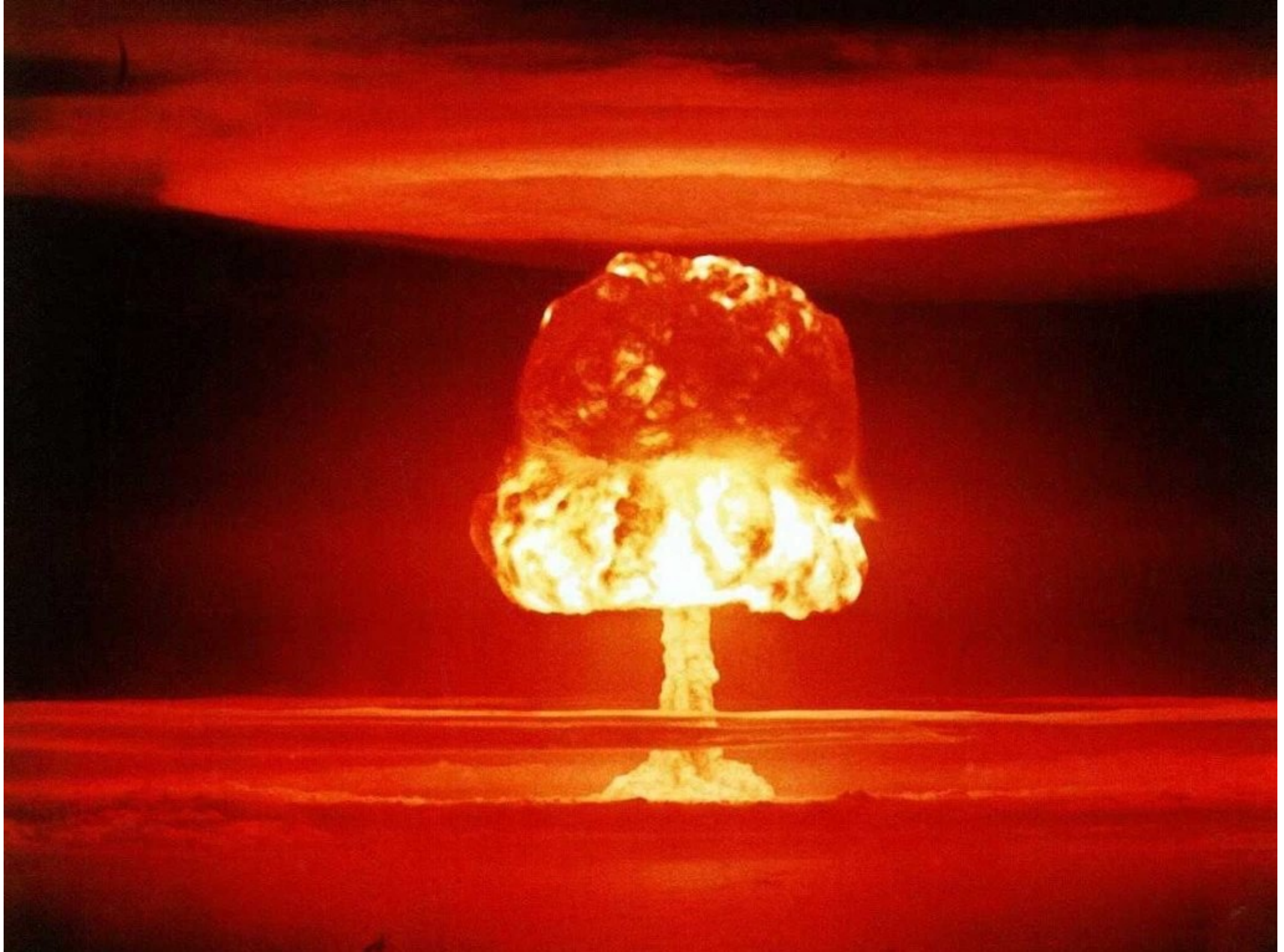
4 nuclei di idrogeno



**1 nucleo di elio
+ radiazione**









	Gasati in modo non letale	Morti	Percentuale dei morti rispetto ai gasati in modo non letale
Germania	191.000	9.000	4,5
Francia	182.000	8.000	4,2
Gran Bretagna	180.597	8.109	4,3
Stati Uniti	71.345	1.462	2,0
Russia	419.340	56.000	11,8