Tech Square   A Dopey Puzzle (Solution)

The answers to the clues can be partially spelled out using some of the two- or three-letter "silicon segments" listed below. However, in order to complete the answers, one or more of the boxes must be filled in with a chemical element symbol, taken from the list of "dopants." Treating each word as a 5-bit value, with the presence or absence of an elemental "dopant" representing 1 or 0, we can spell the word TWENTY-EIGHT, which is both the value "encoded" by the final answer and the dopant used in that answer: element 28 is nickel, or Ni. Taking the indicated letters from the silicon segments spells REVERSE THEM, which is a required processing step before assembling the circuit. 28 is 11100 in binary, so the answer will be of the form IN___IN___IN___ ___, where each blank is filled with one of the remaining silicon segments, reversed. The only combination that makes sense is INDEFINITE INTEGRAL, which is the answer.

Cells	Clue	Code	Letter
[Ho] ME [ ] SC [Ho] OL [ ] ER [ ] (2nd)	One teaching or learning in the house	10100=T	R
[S] EVE [ ] NWI [S] EMA (1st) [S] TER [S]	With "The," legendary heptad of sages (3 wds.)	10111=W	E
[ ] VI (1st) [ ] CT [O] RH [ ] UG [O]	Author of *Les Miserables* (2 wds.)	00101=E	V
[ ] AQ [U] AC [U] LT [U] RE [ ] (2nd)	Raising food in water	01110=N	E
[Te] ST [ ] OS [Te] RO [ ] (1st) NE [ ]	Male sex hormone	10100=T	R
[F] END [F] ORY [ ] OUR [ ] SEL [F] (1st)	Rely on nobody else (3 wds.)	11001=Y	S
[ ] MOL [ ] ECU (1st) [La] RFO [ ] RMU [La]	N$_2$ or SiHCl$_3$, say (2 wds.)	00101=E	E
[ ] BE [At] AR [ ] ET [ ] RE (2nd) [At]	Go back (3 wds.)	01001=I	T
[ ] RA (2nd) [ ] DI [C] AL [C] HI [C]	Political activism as a fashion statement (2 wds.)	00111=G	H
[ ] ACU [Pu] NCT (2nd) [ ] URI [ ] STS [ ]	Needling people?	01000=H	E
[P] HIL (1st) [ ] OSO [P] HIZ [ ] ING [ ]	Emulating Plato or Socrates	10100=T	M

Silicon Segments

~~AC~~	~~ACU~~	~~AL~~	~~AQ~~	~~AR~~	~~BE~~	~~CT~~
~~DI~~	~~ECU~~	~~EMA~~	~~END~~	~~ER~~	~~ET~~	**ETI**
~~EVE~~	**FED**	**GET**	~~HI~~	~~HIL~~	~~HIZ~~	~~ING~~
LAR	~~LT~~	~~ME~~	~~MOL~~	~~NCT~~	~~NE~~	~~NWI~~
~~OL~~	~~ORY~~	~~OS~~	~~OSO~~	~~OUR~~	~~RA~~	~~RE~~
~~RE~~	~~RFO~~	~~RH~~	~~RMU~~	~~RO~~	~~SC~~	~~SEL~~
~~ST~~	~~STS~~	~~TER~~	~~UG~~	~~URI~~	~~VI~~	