

**4-H/FFA Soils CDE
Scantron Instructions**

Before Transferring Answers:

1. Each contestant will need to bring multiple #2 pencils as a sharpener will not be available.
2. Using one blank per digit, write your team number in the boxes provided then fill-in the corresponding bubble below each digit.
3. The Group letter is your assigned rotation group. This letter will NOT be bubbled on your form.
4. Using one blank per letter, write your last name in the boxes provided then fill-in the corresponding bubble below each letter.
5. Using one blank per letter, write your first name in the boxes provided then fill-in the corresponding bubble below each letter.

Transferring Answers from Scorecard to Scantron:

1. Follow the instructions provided by your room/hole monitor.
2. The column numbers, 1-5, represent the hole number being judged at the contest site.
3. Using Part 1 (front side) fill-in the corresponding bubble indicating your answer choice for each soil property.
4. Using Part 2 (back side) fill-in the corresponding bubble indicating your answer choice for each agriculture or home site practice. Note – If for example hole 2 is to be judged as a home site, column 2 will be left blank in the agriculture practice section and column 2 will be completed in the home site practice section.
5. After marking all sections, it is suggested you double check accuracy to make sure all bubbles match the corresponding answers on your scorecard.
6. When finished, turn in your Scantron answer sheet to the room/hole monitor. You may keep your scorecard. Scantron answers cannot be changed after you've left the room/hole.

Feel free to ask the room/hole monitor questions regarding Scantron form completion.

Indiana Soil Evaluation
Form #604UN-1

Team #	Last Name	First Name
0	A	A
1	A	A
2	B	B
3	C	C
4	D	D
5	E	E
6	F	F
7	G	G
8	H	H
9	I	I
0	J	J
1	K	K
2	L	L
3	M	M
4	N	N
5	O	O
6	P	P
7	Q	Q
8	R	R
9	S	S
0	T	T
1	U	U
2	V	V
3	W	W
4	X	X
5	Y	Y
6	Z	Z

Code

0
1
2
3
4
5
6
7
8
9

Team Name / Additional Info

Dirty Fingers
Soil Diggers of America
Team Number 2012
Group C
Registration Time 7:45

Part I - Soil Properties (5 points each, 45 total per site)

	1	2	3	4	5
1 Upland hillslope	1	2	3	4	5
2 Upland swell	1	2	3	4	5
3 Upland flat	1	2	3	4	5
4 Upland depression	1	2	3	4	5
5 Outwash/Lacustrine hillslope	1	2	3	4	5
6 Outwash/Lacustrine swell	1	2	3	4	5
7 Outwash/Lacustrine flat	1	2	3	4	5
8 Outwash/Lacustrine depression	1	2	3	4	5
9 Dune	1	2	3	4	5
10 Flood plain	1	2	3	4	5
11 Filled depression	1	2	3	4	5
SURFACE SOIL COLOR	1	2	3	4	5
1 Gray	1	2	3	4	5
2 Brown	1	2	3	4	5
3 Black	1	2	3	4	5
PREVIOUS EROSION	1	2	3	4	5
1 None to slight	1	2	3	4	5
2 Moderate	1	2	3	4	5
3 Severe	1	2	3	4	5
SURFACE TEXTURE	1	2	3	4	5
1 Sandy	1	2	3	4	5
2 Moderately sandy	1	2	3	4	5
3 Medium	1	2	3	4	5
4 Moderately clayey	1	2	3	4	5
5 Clayey	1	2	3	4	5
SUBSOIL TEXTURE	1	2	3	4	5
1 Sandy	1	2	3	4	5
2 Moderately sandy	1	2	3	4	5
3 Medium	1	2	3	4	5
4 Moderately clayey	1	2	3	4	5
5 Clayey	1	2	3	4	5
NATURAL SOIL DRAINAGE	1	2	3	4	5
1 Poorly	1	2	3	4	5
2 Somewhat poorly	1	2	3	4	5
3 Moderately well	1	2	3	4	5
4 Well	1	2	3	4	5
LIMITING LAYER	1	2	3	4	5
1 Bedrock, 0-20 in	1	2	3	4	5
2 Bedrock, 21-40 in	1	2	3	4	5
3 Dense till, 0-20 in	1	2	3	4	5
4 Dense till, 21-40 in	1	2	3	4	5
5 Fragipan, 0-20 in	1	2	3	4	5
6 Fragipan, 21-40 in	1	2	3	4	5
7 Coarse sand & gravel, 0-20 in	1	2	3	4	5
8 Coarse sand & gravel, 21-40 in	1	2	3	4	5
9 None within 40 in	1	2	3	4	5

Part I - Soil Properties (5 points each, 45 total per site)

MATERIAL	1	2	3	4	5
1 Weathered bedrock	1	2	3	4	5
2 Till	1	2	3	4	5
3 Outwash/Lacustrine deposits	1	2	3	4	5
4 Eolian sand	1	2	3	4	5
5 Loess	1	2	3	4	5
6 Alluvium	1	2	3	4	5
7 Local overwash	1	2	3	4	5
SLOPE	1	2	3	4	5
1 0-2%	1	2	3	4	5
2 3-6%	1	2	3	4	5
3 7-12%	1	2	3	4	5
4 13-18%	1	2	3	4	5
5 19-25%	1	2	3	4	5
6 26-35%	1	2	3	4	5
7 >35%	1	2	3	4	5

Part II - Agriculture Practices (3 points each, 69 total per site)					
LAND USE OVERVIEW	1	2	3	4	5
1 Restore original vegetation to:	(A B C)	(A B C)	(A B C)	(A B C)	(A B C)
2 Prime farmland	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
EROSION AND COMPACTION POTENTIALS					
3 High for erosion by water	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
4 High for erosion by wind	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
5 High for soil compaction	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
BUFFERS AND COVER CROPS					
6 Grassed waterways	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
7 Windbreaks	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
8 Filter strips	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
9 Most significant benefit of cover crops:	(A B C)	(A B C)	(A B C)	(A B C)	(A B C)
CROPPING PRACTICES					
10 Timber stand improvement (TSI)	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
11 Permanent pasture	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
12 Crop rotation	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
TILLAGE PRACTICES					
13 No till	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
14 Moldboard or chisel plowing	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
WATER MANAGEMENT					
15 Drainage	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
16 Irrigation	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
17 Terraces	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
PLANT NUTRIENT APPLICATION					
18 N: A-Low; B-Medium; C-High	(A B C)	(A B C)	(A B C)	(A B C)	(A B C)
19 P: A-Add; B-None; C-Deplete	(A B C)	(A B C)	(A B C)	(A B C)	(A B C)
20 K: A-Add; B-None; C-Deplete	(A B C)	(A B C)	(A B C)	(A B C)	(A B C)
21 Lime: A-Add; B-None	(A B)	(A B)	(A B)	(A B)	(A B)
NUTRIENT POLLUTION POTENTIAL					
A-High, ground water; B-High surface water; C-Med.					
22 Nitrogen pollution potential:	(A B C)	(A B C)	(A B C)	(A B C)	(A B C)
A-High; B-Medium; C-Low					
23 Phosphorus pollution potential:	(A B C)	(A B C)	(A B C)	(A B C)	(A B C)

Part II - Homesite Practices (3 points each, 72 total per site)					
SITE SELECTION & CONSTRUCTION PRACTICES	1	2	3	4	5
1 Is the soil suitable for a homesite?	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
If NO, mark remaining practices as NO, N/A, or No application					
2 Preserve trees & plant new ones	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
3 Maintain soil cover during construction	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
4 Improve surface drainage	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
5 Is the soil suitable for a basement?	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
6 Design for high-clay subsoils	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
7 Potential construction hazards on slopes	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
8 Install diversion structures and drains	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
9 Provide foundation drainage	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
10 High risk for cave-in during construction	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
LANDSCAPE AND LAWN PRACTICES					
A - No application; B - Apply sulfur; C - Plant other species					
11 Manage soil reaction for acid-loving shrubs	(A B C)	(A B C)	(A B C)	(A B C)	(A B C)
A - Apply lime; B - No application; C - Plant other species					
12 Manage soil reaction for lawns	(A B C)	(A B C)	(A B C)	(A B C)	(A B C)
13 Apply phosphorus (P) to lawn	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
14 Apply potassium (K) to lawn	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
ON-SITE SEWAGE DISPOSAL - SUITABILITY					
15 Is soil suitable for an absorption field?	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
If NO, mark remaining practices as NO or N/A.					
SEPTIC TANK PRACTICES					
A - 6 months; B - 1 year; C - N/A					
16 Septic tank outlet filter cleaning interval	(A B C)	(A B C)	(A B C)	(A B C)	(A B C)
A - 1-2 years; B - 3 years; C - 4 years; D - >5 years; E - N/A					
17 Septic tank pumping interval (PI, years)	(A B C)	(A B C)	(A B C)	(A B C)	(A B C)
SOIL ABSORPTION FIELD PRACTICES					
18 Subsurface trench, gravity flow system	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
19 Subsurface trench, flood dose system	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
20 Subsurface trench, pressure distrib. system	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
21 Elevated sand mound system	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
22 Elev. sand mound & subsurface drain	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
23 Drip distribution & secondary treatment	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)
24 Secondary treatment	(Y N)	(Y N)	(Y N)	(Y N)	(Y N)

$$PI = \frac{(D \times G) / 1,000}{R}$$

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D=Disp. (Y = 7; N = 10); G = tank size, gal.; R = Resid.