

# Iowa Soil Judging Score Card

See Soil Judging in Iowa, PM 1106, for interpretation of this form. Mark only one box per question.

## Part I. Surface Features (2 points)

1. Landscape Position	Upland	a
	Intermittent drainageways	b
	Footslope	c
	Terrace	d
	Bottomland	e
2. Slope	Nearly level, 0-2%	a
	Gently sloping, 2-5%	b
	Moderately sloping, 5-9%	c
	Strongly sloping, 9-14%	d
	Steep, greater than 14%	e

**Part I Total**

## Part II. Soil Features—The Profile (17 points)

3. Moist Color of A1 or Ap	Dark	a
	Moderately dark	b
	Light	c
	Very light	d
4. E Horizon Present	Yes	a
	No	b
5. Thickness of A Horizon or A+E Horizons	Thick, more than 12"	a
	Moderately thick, 7-12"	b
	Moderately thin, 3-7"	c
	Thin, less than 3"	d
6. Texture of A Horizon	Coarse	a
	Moderately coarse	b
	Medium	c
	Moderately fine	d
	Fine	e
7. B Horizon Present	Yes	a
	No	b
8. Moist Color of B Horizon (or C Horizon if B is absent)	Uniform brown or dark brown or strong brown	a
	Uniform brown or dark brown or strong brown. Includes olive or yellowish or reddish cast or tints or other redox features	b
	Grayish brown or olive gray, no redox features	c
	Grayish brown or olive gray with gray or rust redox features	d
	None of the above	e
9. Moist color of B Horizon (or C Horizon if B is absent)	Gray with redox features	a
	Uniform gray. May have bluish or greenish cast or rust redox features around roots or small pores	b
	Black. May contain few rust redox	c
	None of the above	d

Soil Site No. \_\_\_\_\_ Contestant Name \_\_\_\_\_

Contestant No. \_\_\_\_\_ School Name \_\_\_\_\_

## Part II. (continued)

10. Texture of B Horizon (or C Horizon if B is absent or buried A if 24" overwash)	Coarse	a
	Moderately coarse	b
	Medium	c
	Moderately fine	d
	Fine	e
11. Soil Depth	Deep, more than 40"	a
	Moderately deep, 30-40"	b
	Moderately shallow, 20-30"	c
	Shallow, less than 20"	d
12. Soil Parent Material	Glacial drift or local sediments from glacial drift	a
	Loess	b
	Alluvium or colluvium	c
	Residuum	d
	Peat or organic	e
13. Native Vegetation	Forest	a
	Transition	b
	Prairie	c
	Marsh	d
14. Surface Drainage	Rapid	a
	Medium	b
	Slow	c
	Ponded	d
15. Internal Drainage	Excessively drained	a
	Well drained	b
	Somewhat poorly drained	c
	Poorly drained	d
	Very poorly drained	e
16. Erosion Class	Overwash	a
	Uneroded or slightly eroded	b
	Moderately eroded	c
	Severely eroded	d
	Gullied land	e
17. Calcareous Surface Soil	Yes	a
	No	b
18. Calcareous B Horizon (or C Horizon if B is absent)	Yes	a
	No	b
19. Stoniness or Rockiness	Yes	a
	No	b

**Part II Total**

**Part III. Land Capability Classification and Productivity Potential (4 points)**

20. Land Capability Class	I. Few limitations	a	
	II. Some limitations	b	
	III. Severe limitations	c	
	IV. Very severe limitations	d	
	None of the above	e	
21. Land Capability Class	V. Noncropland	a	
	VI. Unsited for cultivation	b	
	VII. Restricted for agric.	c	
	VIII. Nonagricultural	d	
	None of the above	e	
22. Land Capability Subclass	None	a	
	e erosion	b	
	w wetness	c	
	s soil	d	
	c climate	e	
23. Productivity Potential	High	a	
	Medium	b	
	Low	c	
	Unsuited	d	
<b>Part III Total</b>			<input type="text"/>

**Part IV. Evaluation of Management Practices (7 points)**

Practices to overcome soil limitations

24. Surface drainage	Yes	a	
	No	b	
25. Subsurface drainage	Yes	a	
	No	b	
26. Grass waterway	Yes	a	
	No	b	
27. Contouring	Yes	a	
	No	b	
28. Strip cropping	Yes	a	
	No	b	
29. Terracing	Yes	a	
	No	b	
30. Conservation tillage	Yes	a	
	No	b	
<b>Part IV Total</b>			<input type="text"/>

**Part V. Suitability of Soils for Nonagricultural Uses (10 points)**

Limitations for building sites for houses with basements

31. Bedrock	Yes	a	
	No	b	
32. Evidence of water table	Yes	a	
	No	b	
33. Flooding	Yes	a	
	No	b	
34. Shrink-swell	Yes	a	
	No	b	

Limitations for conventional septic tank absorption fields

35. Bedrock	Yes	a	
	No	b	
36. Flooding	Yes	a	
	No	b	
37. Evidence of water table	Yes	a	
	No	b	

Source of topsoil

38. Texture group	Suitable	a	
	Not Suitable	b	
39. Thickness of A horizon	Suitable	a	
	Not Suitable	b	
40. Evidence of water table	Suitable	a	
	Not Suitable	b	

**Part V Total**

**Scoring Summary**

<b>Part I</b>	<input type="text"/>
<b>Part II</b>	<input type="text"/>
<b>Part III</b>	<input type="text"/>
<b>Part IV</b>	<input type="text"/>
<b>Part V</b>	<input type="text"/>
<b>Total Score</b>	<input type="text"/>

**IOWA STATE UNIVERSITY**  
Extension and Outreach

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