

# HOMESITE EVALUATION

Revised 12/17/2013

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## Purpose:

The purpose of the Homesite Evaluation Career Development Event is to help develop an appreciation for land features, textures and structures as related to the development and construction of Homesites.

## Objectives:

- I. To understand basic soil differences.
- II. To determine land limitations in terms of foundations for buildings, septic systems, and sewage lagoons.
- III. To determine permeability and erosion for lawns and landscaping.
- IV. To determine availability of water and possibility of flooding.

## Common Core References:

### 7-8th Grade

**CCSS.ELA-Literacy.RST.6-8.3** Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

### 9-10th Grade

**HS-ESS2-5.** Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.

### 11-12th Grade

**HS-ESS3-1.** Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.

## Event Procedures:

1. **Pit Evaluation** - Four pits will be analyzed on land factors and planned use (Family Dwelling Site) by each participant. Each pit will count 97 points. ***Pit depth over 72 " will be indicated on the pit card.***
2. **Pit Cards** and **Water** will be provided. Vertical ribbons will indicate the judges area, horizontal ribbons will not be used.
3. **Team Members** - A team may consist of four members with the three highest total scores making the team score.
4. **Teams** - Two teams per school will be allowed to participate in the Homesite Evaluation Career Development Event. One team may be entered in Production and one team in Horticulture.
5. **References** - *Land Judging in Oklahoma* (No. 148) will be used as reference instructions. Copies of this reference bulletin are available at [landjudging.com](http://landjudging.com)

Contestant Name: \_\_\_\_\_

Contestant Number: \_\_\_\_\_

PIT 1:					
PART 1 Land Factors		PART 2. Planned Use - Family Dwelling Site Without Basement. Interpretations of Limitations in Terms of: (2 pts. each)			
Score Features of the Site Being Considered (3 pts. Each)	Degree of Limitation	Foundations for Buildings	Lawns and Landscaping	Septic Systems	Sewage Lagoon
<b>A. TEXTURE - SURFACE</b> Coarse Mod Crse, Med, Mod Fine Fine	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
<b>B. PERMEABILITY</b> Very Slow <0.06"/hr. Slow 0.06-0.6"/hr. Moderate 0.6-2.0"/hr. Rapid 0.2"/hr.	Slight Moderate Severe V. Severe		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>C. DEPTH OF SOIL</b> V. Shallow <10" Shallow 10-20" Mod. Deep 20-40" Deep 40-72" V. Deep over 72"	Slight Moderate Severe V. Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>D. SLOPE</b> N.L. to Gentle 0-3% Moderate 3-5% Strong 5-8% Steep 8-15% V. Steep 15% +	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>E. EROSION</b> None-Slight-Moderate Severe Very Severe	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>F. SURFACE RUNOFF</b> Slow Moderate Rapid	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<b>G. SHRINK - SWELL</b> (Heaviest Layer) Low Moderate High	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>H. WATER TABLE</b> (permanent or temporary) Deep >72" Mod Deep 40-72" Shallow <40"	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>I. FLOODING</b> None Occasional <1 in 2 yrs. Frequent > 1 in 2 yrs.	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>FINAL EVALUATION</b> All factors none to slight One or more factors mod., none severe One or more factors severe none very severe One or more factors very severe	Slight Moderate Severe V. Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
PART 1: _____ PART 2: _____					
27 pts		18 pts 18 pts 18 pts 18 pts			
TOTAL PART 1 & PART 2: _____		97 pts possible			

PIT 2:					
PART 1 Land Factors		PART 2. Planned Use - Family Dwelling Site Without Basement. Interpretations of Limitations in Terms of: (2 pts. each)			
Score Features of the Site Being Considered (3 pts. Each)	Degree of Limitation	Foundations for Buildings	Lawns and Landscaping	Septic Systems	Sewage Lagoon
<b>A. TEXTURE - SURFACE</b> Coarse Mod Crse, Med, Mod Fine Fine	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
<b>B. PERMEABILITY</b> Very Slow <0.06"/hr. Slow 0.06-0.6"/hr. Moderate 0.6-2.0"/hr. Rapid 0.2"/hr.	Slight Moderate Severe V. Severe		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>C. DEPTH OF SOIL</b> V. Shallow <10" Shallow 10-20" Mod. Deep 20-40" Deep 40-72" V. Deep over 72"	Slight Moderate Severe V. Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>D. SLOPE</b> N.L. to Gentle 0-3% Moderate 3-5% Strong 5-8% Steep 8-15% V. Steep 15% +	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>E. EROSION</b> None-Slight-Moderate Severe Very Severe	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>F. SURFACE RUNOFF</b> Slow Moderate Rapid	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<b>G. SHRINK - SWELL</b> (Heaviest Layer) Low Moderate High	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>H. WATER TABLE</b> (permanent or temporary) Deep >72" Mod Deep 40-72" Shallow <40"	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>I. FLOODING</b> None Occasional <1 in 2 yrs. Frequent > 1 in 2 yrs.	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>FINAL EVALUATION</b> All factors none to slight One or more factors mod., none severe One or more factors severe none very severe One or more factors very severe	Slight Moderate Severe V. Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
PART 1: _____ PART 2: _____					
27 pts		18 pts 18 pts 18 pts 18 pts			
TOTAL PART 1 & PART 2: _____		97 pts possible			

Contestant Name: \_\_\_\_\_

Contestant Number: \_\_\_\_\_

PIT 3:					
PART 1 Land Factors		PART 2. Planned Use - Family Dwelling Site Without Basement. Interpretations of Limitations in Terms of: (2 pts. each)			
Score Features of the Site Being Considered (3 pts. Each)	Degree of Limitation	Foundations for Buildings	Lawns and Landscaping	Septic Systems	Sewage Lagoon
<b>A. TEXTURE - SURFACE</b> Coarse Mod Crse, Med, Mod Fine Fine	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>B. PERMEABILITY</b> Very Slow <0.06"/hr. Slow 0.06-0.6"/hr. Moderate 0.6-2.0"/hr. Rapid 0.2"/hr.	Slight Moderate Severe V. Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>C. DEPTH OF SOIL</b> V. Shallow <10" Shallow 10-20" Mod. Deep 20-40" Deep 40-72" V. Deep over 72"	Slight Moderate Severe V. Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>D. SLOPE</b> N.L. to Gentle 0-3% Moderate 3-5% Strong 5-8% Steep 8-15% V. Steep 15% +	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>E. EROSION</b> None-Slight-Moderate Severe Very Severe	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>F. SURFACE RUNOFF</b> Slow Moderate Rapid	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>G. SHRINK - SWELL</b> (Heaviest Layer) Low Moderate High	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>H. WATER TABLE</b> (permanent or temporary) Deep >72" Mod Deep 40-72" Shallow <40"	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>I. FLOODING</b> None Occasional <1 in 2 yrs. Frequent > 1 in 2 yrs.	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>FINAL EVALUATION</b> All factors none to slight One or more factors mod., none severe One or more factors severe none very severe One or more factors very severe	Slight Moderate Severe V. Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
PART 1: _____ PART 2: _____					
27 pts		18 pts 18 pts 18 pts 18 pts			
TOTAL PART 1 & PART 2: _____		97 pts possible			

PIT 4:					
PART 1 Land Factors		PART 2. Planned Use - Family Dwelling Site Without Basement. Interpretations of Limitations in Terms of: (2 pts. each)			
Score Features of the Site Being Considered (3 pts. Each)	Degree of Limitation	Foundations for Buildings	Lawns and Landscaping	Septic Systems	Sewage Lagoon
<b>A. TEXTURE - SURFACE</b> Coarse Mod Crse, Med, Mod Fine Fine	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>B. PERMEABILITY</b> Very Slow <0.06"/hr. Slow 0.06-0.6"/hr. Moderate 0.6-2.0"/hr. Rapid 0.2"/hr.	Slight Moderate Severe V. Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>C. DEPTH OF SOIL</b> V. Shallow <10" Shallow 10-20" Mod. Deep 20-40" Deep 40-72" V. Deep over 72"	Slight Moderate Severe V. Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>D. SLOPE</b> N.L. to Gentle 0-3% Moderate 3-5% Strong 5-8% Steep 8-15% V. Steep 15% +	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>E. EROSION</b> None-Slight-Moderate Severe Very Severe	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>F. SURFACE RUNOFF</b> Slow Moderate Rapid	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>G. SHRINK - SWELL</b> (Heaviest Layer) Low Moderate High	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>H. WATER TABLE</b> (permanent or temporary) Deep >72" Mod Deep 40-72" Shallow <40"	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>I. FLOODING</b> None Occasional <1 in 2 yrs. Frequent > 1 in 2 yrs.	Slight Moderate Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>FINAL EVALUATION</b> All factors none to slight One or more factors mod., none severe One or more factors severe none very severe One or more factors very severe	Slight Moderate Severe V. Severe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
PART 1: _____ PART 2: _____					
27 pts		18 pts 18 pts 18 pts 18 pts			
TOTAL PART 1 & PART 2: _____		97 pts possible			