Almost all words in संस्कृतम् are formed from set of dhätus (धातुः), verbal roots. (Other meanings of the word are "an elementary substance", and "an ore of the metal"). From these basic units all words are derived by adding prefixes and suffixes. Both types of affixes are called प्रत्यायः।

The unit to which affixes are added is called a stem (अङ्ग); Thus a धातुः is called a stem when some affix is added to it. A word, पद, is that unit to which a conjugational or a declensional affix has been added. Thus , if one adds the third person, present tense, singular, affix to a धातुः, the धातुः become an अङ्गः, and the product formed by the addition of the affix is called a पदम्।

Example1: When the present tense, third person singular conjugational affix ति is added to the धातु:
Vप् ( to read), the word "पठति" meaning "reads" is formed.
पठ् + अ + ति = पठति ( Here "अ" is the class affix)
verbal stem (अङ्गः) + conjugational affix $=$ क्रियापदम् (word denoting action)

Conjugational Affixes : There are 2200 verbal roots in संस्कृतम्। Verb forms in ten tenses and four moods (present, past not pertaining to the day of action, general past, remote past, general future, future not pertaining to the day of action make the six tenses; imperative, potential, benedictive and conditional constitute the four moods) are derived from these roots by the addition of the appropriate tense or mood affixes.

The roots are divided unequally in ten conjugations called गणः। The roots in a particular गणः takes an affix that is specific to that गणः this affix is called the गणविकरणम् (गण, class or group; विकरणम्, modifier). This गणविकरणम्, गणः affix is added to the root before conjugational affixes are added. The set of nine affixes used in the Present tense (लँट् लकारः; वर्तमानकालः) in all ten conjugations is given below:

Present tense (लँट् लकारः; वर्तमानकालः) Conjugational Affixes

|  | एकवचनम्(Singular) | द्विवचनम् (Dual) | बहुवचनम (Plural) |
| :--- | :--- | :--- | :--- |
| उत्तमपुरुषः (First Person) | मि | वः | मः |
| मध्यमपुरुषः (Second Person) | सि | थः | थ |
| प्रथमपुरुषः (Third Person) | ति | तः | अन्ति |

This year we will study roots from conjugations $1,4,6$, and 10 .
Table 1 lists the conjugation affixes, the number of roots in each conjugation, and the names of the conjugations. Each conjugation is referred to by its number, and also by a name derived from the first root listed for that class in the धातुपाठः। The first root listed for conjugation 1 is the root $\sqrt{ }$ भू, so the first conjugation is called भ्वादि- गणः, meaning "the group with $\sqrt{ }$ भू as the first member."

Table1: Roots from conjugations $1,4,6$, and 10

| Conjugation | Name | \# of <br> roots | Class <br> Affix | गुणः <br> of short <br> medial vowel | गुणः <br> of final <br> vowel | वृद्धिः <br> of final <br> vowel |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| प्रथमगणः (1) | भ्वादिगणः (भू) | 1,079 | अ | yes | yes | no |
| चतुर्थगणः (4) | दिवादिगणः (दिव्) | 140 | य | no | no | no |
| षष्ठगणः (6) | तुदादिगणः (तुद) | 157 | अ | no | no | no |
| दशमगणः (10) | चुरादिगणः (चुर्) | 440 | अय | yes | no | yes |

Please see http://www.arshavidyacenter.org/OLD/Samskratam/segment2.4.pdf for detailed description of roots in the q्वादिगणः (Ist conjugation).
4. दिवादिगणः Please refer to Page 13 and 14 of Antoine book 1

पुष् (to nourish) + य + ति = पुष्यति (The short medial vowel does not take गुणः )

| पुरुषः | एकवचनम् | द्विवचनम् | बहुवचनम् |
| :---: | :---: | :---: | :---: |
| उत्तम | पुष्यामि | पुष्यावः | पुष्यामः |
| मध्यम | पुष्यसि | पुष्यथः | पुष्यथ |
| प्रथम | पुष्यति | पुष्यतः | पुष्यन्ति |


| दिवादिगण: Regular Roots | दिवादिगणः Irregular Roots |
| :---: | :---: |
| 1. दासो गजं पुष्यति। The servant nourishes the elephant. (Vपुष् - to nourish) <br> 2. प्रासादमभितो नृत्यामः। We dance in front of the palace. (Vनृत् - to dance) <br> 3. जनश्चन्द्रं पश्यति तुष्यति च। The person sees the moon and is pleased. ( $\sqrt{ }$ तुष्- to be pleased) <br> 4. इन्धनम् अस्यामि।= इन्धनमस्यामि।। throw fuel. ( $\sqrt{ }$ सस् - to nourish) <br> 5. बाला: मुहयन्ति I= बाला मुहयन्ति। The boys faint. ( $\sqrt{\text { मुह् - to faint) }}$ | 1. नरः श्राम्यति जलं च पिबति। The man wearies and drink water. ( $\sqrt{ }$ श्रम् - to be weary $\rightarrow$ $\sqrt{\text { श्राम }}$ ) <br> 2. नृपो दासान् क्षाक्यति। The king fogives the servants. ( $\sqrt{\text { क्षम् - to forgive }} \rightarrow \sqrt{ }$ क्षाम्) <br> 3. हृदं निकषा बाला दीव्यन्ति। The children play near the lake. ( $\overline{\text { दिव् - to play } \rightarrow \text { Vदीव) }}$ <br> 4. तृणं करं विध्यति। Grass pierces the hand. <br> ( $\sqrt{\text { व्यध् - to pierce } \rightarrow \text { }} \rightarrow$ विध) <br> 5. I play \& I am glad. क्रीडामि (दीव्यामि) माद्यामि च। ( $\sqrt{\text { मद् - to be glad } \rightarrow \text { }}$ माद) |


6. तुदादिगणः Please refer to Page 19 and 20 of Antoine book 1

तुद् (to strike) + अ + ति $=$ तुदति (The short medial vowel does not take गुणः )

| पुरुष: | एकवचनम् | द्विवचनम् | बहुवचनम् |
| :---: | :---: | :---: | :---: |
| उत्तम | तुदामि | तुदावः | तुदामः |
| मध्यम | तुदसि | तुदथः | तुदथ |
| प्रथम | तुदति | तुदतः | तुदन्त्ति |

तुदादिगणः Regular Roots

## तुदादिगणः Irregular Roots

1. नरो दासं पृच्छति । The man asks the servant. (Vप्रच्छ् - to ask $\rightarrow$ पृच्छ्)
2. शरीरं लिम्पथः। You two anoint the body. ( लिप् - to anoint $\rightarrow$ लिम्प)
3. रत्नानि विन्दति। He finds jewels. (Vवि द् - to find $\rightarrow$ विन्द)
4. जलेन कुसुमानि सिञ्चामः। We sprinkle the flowers with water. ( सिच् - to sprinkle $\rightarrow$ सिञ्च)
5. अनिलो वृक्षान् लुम्पति। The wind breaks the trees. ( $\sqrt{\text { लुप् - to break } \rightarrow \text { लुम्प) }}$
6. चुरादिगणः Please refer to Page 27 and 28 of Antoine book 1

चुर् (to steal) + अय + ति = चोर् + अय + ति = चोरयति (The short medial vowel takes गुणः )

| पुरुषः | एकवचनम् | द्विवचनम् | बहुवचनम् |
| :---: | :---: | :---: | :---: |
| उत्तम | चोरयामि | चोरयावः | चोरयामः |
| मध्यम | चोरयसि | चोरयथः | चोरयथ |
| प्रथम | चोरयति | चोरयतः | चोरयन्ति |

In $10^{\text {th }}$ conjugation the final vowel takes वृद्धि:
धृ (to owe) + अय + ति = ध् ऋ+ अय + ति $=$ ध् आर् + अय + ति ( the final vowel ऋ of धृ takes वृद्धिः (The वृद्धिः of ऋ is आर् ))
= धारयति
चुरादिगण: Regular Roots

1. नरो बन्धुनां गृहात् धनं चोरयति IThe man steals wealth from the relative's house. (Vचुर् - to steal)
2. देशे वीरान् पूजयामः। In the country we worship the brave. (Vपूज् - to worship)
3. कपोतान् गणयामः IWe count the pigeons. ( $\sqrt{\text { गण् - to count) }}$
4. दासाय कुसुमे धारयामि। । owe two flowers to the servant. (Vधृ - to owe)
5. नृपस्य रत्नानि रचयामि।। arrange the jewel of the king. (Vरच् - to arrange)
6. मुनिर्दासं न पीडयति । The sage does not oppress the servant. ( $\sqrt{ }$ पीड् - to opress)
7. कथयति। He/she tells ( $\sqrt{\text { कथ् - to tell) }}$
8. कविर्नृपं वीरं घोषयति। The poet declares the king to be brave. ( $\sqrt{\text { घुष् }}$ - to proclaim)
9. नृपो दासं दण्डयति । The king punishes the servant. ( Vदण्ड् - to punish)
10.शिशून् सान्त्वयामि।। console the babies. ( $\sqrt{ }$ सान्त्व् - to console.)

## चुरादिगणः Irregular Roots

1. पत्रैः फलानि छादयति।He/She covers the fruits with leaves. (Vछद्- to cover $\rightarrow$ छाद् )
2. बालो वस्त्राणि क्षालयति। The boy washes the clothes. ( $\sqrt{\text { छल - to }}$ wash $\rightarrow$ छाल् )
3. गृहयोर्रन्नं भाक्षयामि।। eat food in two houses. (Vभक्ष्- to eat $\rightarrow$ भाक्ष्)
